COMPARISON OF OKLAHOMA STATE UNIVERSITY EXTENSION SPECIALISTS' ROLES AS PERCEIVED BY SPECIALISTS AND FIELD STAFF MEMBERS

By

ROBERT FRED REISBECK

Bachelor of Science in Agriculture
Colorado State University
Fort Collins, Colorado
1954

Master of Science
Oklahoma State University
Stillwater, Oklahoma
1973

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF EDUCATION
July, 1974

COMPARISON OF OKLAHOMA STATE UNIVERSITY EXTENSION SPECIALISTS' ROLES AS PERCEIVED BY SPECIALISTS AND FIELD STAFF MEMBERS

Thesis Approved:

Walter J. Ward
Thesis Adviser

James W. Rhea

Kenneth St. Clair

Thomas C. Carman

D. D. Dunlap
Dean of the Graduate College

PREFACE

This exploratory study is concerned with comparing Oklahoma State University Extension specialists' role expectations as perceived by specialists and by members of the field staff. Such studies in the area of communication are done in order to obtain information which can result in a more ideal aligning of role prescriptions, role descriptions and role expectations, with the end goal being an educational organization even better able to meet educational needs of people of Oklahoma.

The author wishes to express his appreciation to Dr. Walter Ward, head of graduate studies in mass communication at OSU. Dr. Ward, the author's thesis adviser, has been most helpful in guiding this project to completion.

Appreciation is also due other members of the doctoral committee; Dr. Kenneth St. Clair, Dr. Thomas Karman and Dr. James Rhea.

And without the encouragement of my wife, Sandra, and our children, Robin, Craig and Holly, the work would never have been completed.

TABLE OF CONTENTS

LIST OF TABLES

Table Page

LIST OF FIGURES

CHAPTER I

INTRODUCTION

The mission of the Extension Division of Oklahoma State University is to provide educational programs to help all people of Oklahoma meet their needs, overcome their problems and take advantage of their opportunities.

This mission considers the extension enterprise of the institution to be university-wide in thrust, comprising adult educational emphases of all colleges: Agriculture, Arts and Sciences, Home Economics, Business, Education and Veterinary Medicine. Each of these colleges has an extension director and a staff whose job is to make educational programs available to the general public. The programs are of several types, e.g., credit or non-credit and fee or non-fee.

In a real sense, though, the focal point of the university extension effort is the county OSU extension center. These centers, located in the county seat of each of Oklahoma's seventy-seven counties, are the county residents' place of contact for extension educational programs. Planning, teaching and evaluation of the programs, for the most part, take place at the county level.

Most planning and determination of what to teach in a program, the actual teaching and the evaluation of the program's effectiveness are done by county extension staff members. Each staff has a minimum staff of a county extension director and an extension home economist.

In addition, a number of counties have a man and a woman 4-H agent. And a few counties have agents with specialized technical assignments such as horticulture or entomology. Overall staff size is related to county population, program need and the budget of the county extension center.

Each county extension staff member will undertake the educational programming involved within his or her area of assignment. A home economist may work with educational programs in such fields as family nutrition, child care or clothing. A county director generally will work in all subject-matter areas including agriculture, business management, horticulture, and community resource development. All these individuals work closely with county residents to determine needs for programming and then plan and implement the programs to help meet the needs.

In many cases the county staff member does the actual teaching. In other cases the county worker promotes the program and obtains the audience within the local community. The teaching, then, is done by an extension subject-matter specialist from the university or by a teaching-extension professor from the institution.

In any event, the local county extension director is ultimately responsible for all educational programming of his extension center. The county director is the administrative head of that office, and as such, he must see that staff members in his unit are planning and conducting needed educational programs in their areas of assignment.

To provide a backup of subject-matter expertise, information, material and personal assistance to local county staff members, a number of subject-matter specialists have been assigned to the state

extension staff. Located on the Oklahoma State University campus, these specialists generally have advanced degrees in their subject-matter field, and work in technical areas such as farm management, clothing and textiles, family life, agronomy, housing and in 4-H and youth development.

As this study was being conducted, there were fifty-nine persons with specialist assignments. Included in this group were forty subject-matter specialists: College of Agriculture; nine extension specialists: family living; six program specialists: 4-H and Youth Development; two community resource development specialists; one home economics specialist; and one communications training specialist.

A specialist is available to provide technical information and material covering important facets of a particular subject area to the county staff members. In addition, a subject-matter specialist has the responsibility of executing an effective educational program in a needed area of his field. This program, then, is used in the field by county extension agents. Such programs might include such diverse efforts as cotton insect control, estate planning, farm machinery repair, or family money management.

Thus, in addition to educational programs developed by county workers at the county level, there are those developed by specialists for use by county agents at the county level.

Important to remember is that the specialists' jobs are not administrative. Their role of providing subject-matter assistance and educational programs is strictly a staff assignment. The specialist is administratively responsible to an extension subject-matter department head; specialists are not hierarchically above the county staff

members. Their programs and materials are available only to help agents in the field as needed and wanted.

OSU Extension Administrative Structure

The Extension Division of Oklahoma State University has a well defined hierarchical structure as is flow-charted in Appendix E.

Basically, the administrative line runs from the Vice President for Extension to the District Directors and to the County Directors. Each administrative head has a line staff responsible to him. The subject-matter specialist administratively is responsible to an administrative director, yet programs of the specialists are for use by members of county staffs, including the county director. The administrative head--or person to whom the specialist is responsible--is not administratively superior to the district director or to the county director. This structure illustrates the reason specialists' programs may or may not be used by county staff workers. County workers make the decision.

In practice, specialists' programs are presented to the district director. The district director acts as a screen for such programs, accepting, rejecting or recommending change because he is aware of other demands being made upon the county workers within his district. (And it should be remembered that the administrative director, the person to whom the specialist is responsible administratively, is not administratively superior to the district directors.)

Prescribed Roles of Specialists

Job descriptions have been prepared and distributed for OSU

Extension subject-matter specialist positions in the College of Agriculture, Family Living, 4-H and Youth Development, Community Resource Development and Personnel.[1] These job descriptions appear in Appendix C.

Job descriptions generally reveal that the specialist is called upon to be familiar with the subject-matter of the field, to advise field staff of developments and trends in the field, to provide subject-matter information and material for distribution, to train the field staff, and to develop, execute and evaluate an educational program.

There is no mention as to specific aspects of the specialists' roles. Execution of the job is left to the ingenuity of the specialist. However, the specialist is charged with getting the educational job done.

Descriptions of the jobs of all OSU Extension workers are found in "University Extension Job Descriptions," a publication available to all employees of the organization.[2] A letter from Dr. J. C. Evans, Vice President for Extension, which is included as the first page of the publication, tells the reader that:

> We think the two main purposes of a job description are to help you understand and explain your work to others and for supervisors to explain duties, tasks, responsibilities and relationships to members of their staff.

Evans also says that "a job description should be viewed as a viable, opportunity-providing instrument rather than a responsibility-limiting tool." Our job descriptions will and should change to

---

[1] Oklahoma State University Extension, University Extension Job Descriptions (Stillwater, 1972).

[2] Ibid.

accommodate new personnel, programs and responsibilities.

The job description is the only written description of the specialist's role. Any other description of that role is on an informal basis as transferred to the specialist by a supervisor, or the description of that role as gathered by perceptions of needs and demands of others by the specialist himself.

Taken as a whole, then, the role of the specialist and the certain aspects required to fill the role are not bound by formal organizational demands and edicts. The subject-matter specialist is free to determine ways to provide subject-matter backup and subject-matter programs to field staff personnel. The specialist also is free to determine and implement ways to help the county staff adopt and use his particular program.

County Program Planning

Planning and presenting informal educational programs at the county level is an ongoing thrust of OSU Extension. County staff members continually are going through planning and presentation procedures for each of the many programs in their counties.

There are certain definable phases in this process. They include:

1. Determination of Needs. In this beginning phase, needs, wants and opportunities of county residents are considered. This is done by county extension agents working closely with advisory committees. As needs are determined, priorities are established. Then the extension staff within a county designs an informal (or out of school) educational program to help meet the identified need.

2. Resource Allocation. To present an educational program, the county staff must consider the character of the program. Will it be a workshop? A several-day short course? A field day? A plan is prepared and resources allocated to meet the plan's demands. This would include human and material resources. Such things as teachers,

a lesson plan, teaching facilities, subject matter information and material (bulletins or fact sheets) would be considered.

3. Program Promotion. The target audience of the program must be determined: names, addresses and telephone numbers. Then a program of selling the educational event is outlined and undertaken, including efforts to gain attendance and participation. This might include the use of newspaper and radio news stories, telephone calls, personal letters, and even personal calls on people on the target list. At this stage, the use of community thought leaders generally is useful in persuading people to attend or to take part in the educational program.

4. Program Presentation. This is the teaching done during the program itself. The teaching may be accomplished in a classroom situation, in a seminar or discussion, or it may be a field day (as in the case of a demonstration of new crop varieties or proper crop fertilization).

5. Program Evaluation. Following the educational event, the county staff, working with a program committee of lay-people, attempt to determine program effects. Did the effort really approach the goals and help meet the overall needs? Is more effort needed?[3,4]

This may appear to be a rather cumbersome and time-consuming process simply to "hold a class at the extension center." However, it would seem evident that any informal educational program conducted outside of the confines of ordinary ongoing classroom situations must be viewed in this procedural concept if real needs of the community are to be met by educational efforts. In other words, real change in any community demands the involvement of people in a pre-determined plan as evidenced by this program planning procedure.

Actually, this is a non-rigid approach to the social action process, whereby planned changes to meet real human needs are accom-

---

[3] J. C. Evans, Program Planning (Oklahoma State University, 1966).

[4] Lincoln David Kelsey and Cannon Chiles Hearne, Cooperative Extension Work (Ithaca, New York, 1963), pp. 117-246.

plished through definite steps and procedures, all of which are aimed at getting human involvement. This in turn is based on securing community leader involvement and participation, as well as legitimation.[5] Lionberger wrote that to bypass the steps of planning and legitimation is tatamount to failure in making change.[6]

The employment of a social change model such as the planning and presentation process consumes a county extension agent's time. Knowledge of community leadership is important. Careful planning is necessary.

New Programs For More People

There has been an increased emphasis by extension's administrative staff for county extension staffs to provide more programs for new audiences. In fact, this was the theme of the 1973 Annual OSU Extension Conference held in January. More people in communities across the state must be reached by informal educational programs.

Because county workers are being asked to pursue this aggressive course--just as any educational institution is seeking new students--county staff members more actively are engaged in "selling" people in their counties on enrolling and participating in short courses, seminars, workshops, field days and other events--programs which are supposed to be of benefit to them. For persons who have long considered themselves as educators or as agents of change, selling education becomes a new and sometimes a difficult task, one for which most

---

[5] Colorado State University, Securing Social Action, 1964.

[6] Herbert F. Lionberger, Adoption of New Ideas and Practices (Ames, Iowa, 1960), p. 54.

agents trained in agriculture or home economics are somewhat poorly prepared.

Numbers of educational events as well as numbers of participants have become one of the criteria against which county workers are measured in the annual performance review.

A number of reasons exist for emphasizing an increasing number of county level educational programs. One is purely economic. Just as the nation's colleges and universities attempt to serve an increasing number of resident students to make better use of facilities and staffs, the county extension center must serve more people, particularly with programs of a fee nature. There is also the pressure of county residents desiring classes and information about an increasing number of subjects.

Ragel, Barker and Johnson, researchers at Kansas, have seen an increase in intensity of extension programs.[7] Comparing the years 1963-64 with 1954-55, they found a significant increase in county-level program offerings in agronomy, animal husbandry, cooking, club and class leadership, general home economics, floriculture and sewing. Youth programs, too, were found to contain more meetings dealing with cultural, educational and recreational thrusts.

As intensity of programs increases, the day-to-day work of the county staff members increases. Programming planning and subsequent involvement of lay leaders take a greater amount of time; time that must be carefully scheduled and wisely used.

---

[7]Dan Ragel, Roger G. Barker and Arthur Johnson, "Measuring Extension's Impact," Journal of Cooperative Extension, Vol. V (Fall, 1967), No. 3.

Specialist's Role in County Program Planning

Extension subject-matter specialists, as has been shown, are responsible for developing and implementing an educational program in the specialist's area of emphasis. This would mean that a specialist wants county workers to adopt the program or to put it into use. In the milieu that surrounds the specialist as he attempts to get program adoption by county staff members, a number of factors may be significant. Fifty-eight other specialists may also be seeking program adoption by county workers whose time already may be limited. A particular specialist's program may not be perceived as complete enough for agents to use. A specialist's program may not be perceived as needed. Communication between specialist and field staff may be inadequate for successful adoption.

Regardless of the factors that interact in any situation, the specialist needs to get program adoption.

Oklahoma State University, as a social organization, has provided tools of communication between specialist and field staff in the way of organizational structure and job assignment to that structure. However, problems arise because of the complexities of group behavior. These problems that face specialists in getting program adoption are role problems in nature, and can be analyzed by relating them to role theory.

People occupy roles within any organization. These roles must be filled if the organization is to accomplish the purpose for which it was organized. The roles actually are behaviors exhibited by the individuals. However, it is the perception of the roles by different persons that can cause difficulty. That is, one person may have a

different perception of a particular role of another person, and consequently conflict may result.

Berlo has discussed role behavior from three approaches: role perscriptions, role descriptions and role expectations.[8]

> 1. Role prescriptions: the formal, explicit statement of what should be performed by persons in a given role.
>
> 2. Role descriptions: a report of the behaviors that actually are performed by persons in a given role.
>
> 3. Role expectations: the images that people have about the behaviors that are performed by persons in a given role.
>
> In the ideal system, prescriptions, descriptions and expectations about a given role are equivalent. In most groups, they are not equivalent. If they differ radically, communication breakdowns occur within the system.

Relating this to the OSU Extension organization, role prescriptions are the published job descriptions and the formal statements of work required to fill a certain role. Role descriptions are the work actually done by persons filling certain roles. And role expectations are the perceptions by people of what everyone in the organization should do to fill the particular roles.

All individuals within the extension organization are making predictions of what others will do based on their own role expectations. Agents in the field, for example, are making predictions about their own work based on the role expectations they each hold of the individual specialists' behaviors. When those predictions are based upon role expectations that differ radically from role descriptions of the

---

[8] David K. Berlo, The Process of Communication (Holt, Rinehart and Winston, 1960), pp. 153.

specialists, communication breakdowns result. Specialists, too, may hold a completely different role expectation of their own roles than that held by agents. And specialists may have a different role expectation of agents than agents hold.

Chances for differences in role expectation may be great in the OSU Extension organization. This may be true because of the "structural distance" within the organization between specialists and field workers. Specialists are administratively responsible to a subject-matter department head, and agents are administratively responsible to a district director. Furthermore, the administrative department head is not administratively superior or subordinate to the district director.

Another factor may complicate the role prescription, descriptions and expectations. A specialist may tend to satisfy what he feels is the role expectation of his position held by his subject-matter department head, rather than to satisfy what he feels to be the role expectation held by an agent in the field. Yet the subject-matter specialist's role prescription is to provide help and material to the agent in the field. Brown and Deekens pointed out that the Cooperative Extension Service did not conform to the patterns of a formal bureaucracy with a hierarchy of offices in which channels of authority were clearly defined and offices had subordinate-superordinate relationships.[9] They said the specialist felt the administration was his "boss," but directions were also given by county staffs. In fact, it would seem

---

[9]Emory J. Brown and Albert Deekens, "Roles of the Extension Subject Matter Specialist," Rural Sociology, XXIII (September, 1958), p. 275.

the specialist occupied a dysfunctional position, caught between the expectations of administration and county staffs, both of whom exercised authority over the specialist in a somewhat different manner.

Review of Literature

There have been few studies on the role of extension subject-matter specialists. Research and papers have emphasized the work of extension agents at a local or county level, probably because it is there that involvement with people as the primary audience occurs. Finally, the numbers of specialists are only a small part of the extension worker universe.

Specialist Roles

Blalock, in an article appearing in the Journal of Cooperative Extension, wrote "It should be recognized that our present research knowledge of the role of specialist is inconclusive and that such analysis will of necessity be flavored with personal experiences and observation."[10]

Harvey and Scheneman found that there seemed to be some agreement that the most important job of the specialist should be that of training agents in a particular subject matter area. Yet their research did not substantiate that this was the way most specialists spend the majority of their time. They cited at least three possible explanations. First, it is much easier for the specialist to keep busy teaching farmers and homemakers than training agents to teach.

---

[10] T. C. Blalock, "Role of the Subject Matter Specialist," Journal of Cooperative Extension, Vol. I (Summer, 1963), pp. 93-100.

(A couple of good talks can last all winter!) Secondly, the specialist felt more secure if the agent was less well trained and therefore dependent upon him. Thirdly, many agents have viewed the specialist as a service agent--or as a resource for literature and material--and not as a trainer of agents.[11]

In Missouri, Ham[12] reported research findings that supported several suggestions for action which were made to promote more originality and initiative among personnel. Specifically, identify program goals, and through a means-end chain, relate these to the organizational goals; (2) build a means-end chain between organizational goals, program goals, and role expectations which can allow the desired flexibility while giving positive direction to the role performance.

According to Ham, then, the role of an extension specialist should be governed, not by certain rules and regulations, but by what it would take to get the particular program goals accomplished. Organizational goals, rather than organizational structural rigidity, would be conducive to role accomplishment.

Kelsey and Hearne perceived the role of the subject-matter specialist in somewhat the traditional light. They viewed him as backing up the work of county agents.

> In backing up the work of agents in counties, the subject-matter group of specialists, like the supervisory group, is concerned with improvement of teaching. Specialists

---

[11]John J. Harvey and Carl N. Scheneman, "The Functions and Procedures of Subject-Matter Specialists in the Missouri Cooperative Extension Service" (unpublished PhD dissertation, University of Wisconsin, 1959), pp. 48-80.

[12]Don G. Ham, "Performance: Goals and Role Ambiguity" (unpublished PhD dissertation, Colorado State University, 1968).

> view the whole program and relate subject matter to all of the phases of program making and execution. Five broad groups of functions are performed by the subject-matter specialists, namely, planning functions, training functions, direct teaching, field studies to increase the effectiveness of the work in their respective subject matter lines, and preparation of teaching material.[13]

Apparently, different states vary in their use of specialists. In North Carolina, for example, specialists give priority to request for assistance included in county plans of work. In fact, Andrews[14] found that filling those requests constituted a major portion of specialists' time in some departments. This would seem inconsistent with a view that the subject-matter specialist should develop a program within his major area for major emphasis during the year, as is found in most job descriptions for specialists. In Oklahoma, specialists develop a program within their subject area for major emphasis. However, the program is one the specialist has given thought to, based on needs expressed in county plans of work.

Specialists hold certain norms for performance of their role; agents and administrators also hold norms for this position. These norms don't always coincide.

Scheneman says these incompatible expectations result in role conflict.

> Even through the specialist is responsible to the state administration, success of his effort depends to a great

---

[13] Lincoln David Kelsey and Cannon Chiles Hearne, Cooperative Extension Work (Ithaca, New York, 1963), pp. 72-74.

[14] W. G. Andrews, "The Role Expectation of the Extension Subject-Matter Specialist in North Carolina as seen by the Specialist and County Agricultural Agents" (unpublished PhD dissertation, Cornell University, 1963).

> measure on how well he is received, and his services utilized by county staffs. To be in the good graces of the county personnel, he may find his energies being expended in a direction not altogether in keeping with how he thinks his competence can be most effectively utilized.[15]

Loomis and Beegle defined power as control over others.

> It may result from authority or from influence. Authority is viewed as the right to control the action of others, while influence is regarded as control over others in a non-authoritative way. Influence is based upon such things as skill in human relations, past favors, superior knowledge, and role performance. Any power the specialist might have over county personnel would fall under the heading of influence. In addition to his technical knowledge, perhaps the specialist's greatest asset in influencing action of agents and extension administrators lies in powerful commodity and other organized groups with which he may work. Because of close working relationships, his influence with them is likely to be greater than that of other extension personnel.[16]

Willingness to conform to the agent's norms for the position affects the specialist's influence, according to Blalock.[17]

Perhaps most important of all, though, is how well he is liked by those occupying county positions. Unfortunately, this often is more important than his technical ability. Many individual cases could be cited where a specialist possessing great technical knowledge, was relatively ineffective because he was not accepted by agents.

As a part of his Ph.D. dissertation, Boone asked subject-matter specialists from Louisiana, Montana, Wisconsin and New York to rank

---

[15]Harvey and Scheneman, Ibid.

[16]Charles P. Loomis and Allan J. Beegle, Rural Sociology: The Strategy of Change (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1957), p. 4.

[17]Blalock, Ibid., p. 96.

four roles relative to the manner in which they are being performed.[18] The roles, in order, included: (1) A subject-matter consultant and expert always on call to county staffs and organizations, (2) Teaching people in the state, (3) A trainer or teacher of agents in subject matter, and (4) A resource and liaison person transmitting needs to researchers and providing answers to county staffs.

In a study conducted in Wisconsin, Austman found county agents rely more heavily on programs and subject-matter information as "the stakes get higher." He found few agents who, after one or two days of special training, felt competent to advise a dairyman contemplating a remodeling and expansion program that involved an outlay of $25,000 or more.[19]

U. G. Word stressed the need for communication clarity between specialist and county staff members in program planning. He said the specialist and the county agent often fail to get together in their understanding of just what it is the agent needs, and of just what the specialist can provide as far as definite programs are concerned.[20]

All these authors dealt, at least indirectly, with the concept of roles which occupies a key position in the fields of sociology, social psychology and cultural anthropology. It frequently is used as

---

[18]Edgar J. Boone, "The Professional Status of Extension Specialists as Compared With Research-Resident Teaching Staff of Selected Departments in Four Land-Grant Institutions" (unpublished PhD thesis, University of Wisconsin, January, 1959).

[19]Helgi H. Austman, "The Functions of Specialists in the Cooperative Extension Service in Wisconsin" (unpublished M.S. thesis, University of Wisconsin, 1957).

[20]U. G. Word, Jr., "A Study of State Extension Specialists' Role in Program Development in Arkansas" (unpublished PhD thesis, University of Wisconsin, 1964).

a central theme in the study of the structure and functioning of social systems such as the Cooperative Extension Service, as well as for the explanation of individual behavior.

There are many ways role can be defined and used in the study of organizations and the behavior of individuals within organizations. Sargent defines role as a "pattern or type of social behavior which seems situationally appropriate to him /the individual/ in terms of the demands and expectations of those in his group."[21]

If an organization is to perform effectively, it is important there be agreement on what is expected of individuals occupying different roles. For example, as Bernard points out, a role cannot be performed alone; it must always have a counterpart. Thus, confusion on the part of one role performer spreads to those who are performing with him. And when there is a lack of agreement of role expectation, the result is role conflict.[22]

Communication

Agreement among individuals occupying roles and their counterparts necessarily must rely on communication among those individuals. It is in this area that people occupying any role must become rather adept. For effective communication is a process--an ongoing activity among the several individuals playing roles and counter roles, that results

---

[21]Stansfled Sargent, "Concepts of Role and Ego in Contemporary Psychology," Social Psychology at the Crossroads, eds. John H. Rohrer and Musafer Sherif (New York: Harper and Brothers, 1951), p. 360.

[22]Jessie Bernard, Social Problems at Midcentury (New York: Dryden Press, 1959), p. 43.

in role clarification. Communication certainly is the extreme opposite of the view--"But I told him, and he should know exactly what to do"--as is so often heard.

Effective communication, which results in role clarification, has its seeds in this exerpt from the Communication Handbook of the American Association of Agricultural College Editors: "If the secret of communication is knowing people, then the unsuccessful communicator probably is one who doesn't know his audience. He may be able to write, speak, or take pictures skillfully, but doesn't know or hasn't taken the trouble to find out 'what makes people tick.'"[23]

And, as Berlo wrote, "If the source does not reach the receiver with his message, he might as well have talked with himself."[24]

The concept of process in communication can be related to changing roles and counter roles. In this study it was shown that the roles of county extension agents are changing as an expressed and implied need to increase educational programming with new audiences arises. Therefore, as the county worker's role changes, there may be a need for the role of the subject-matter specialist to change, if the county worker is to get increased help from the specialist. Unless the communication between those occupying roles and counter roles is acted out in terms of process, role conflict can result.

This study centered on the role of the specialist in preparing, presenting and evaluating subject-matter programs for use by the

---

[23]American Association of Agricultural College Editors, Communications Handbook (Danville, Illinois: Interstate Printers and Publishers, Inc., 1970), p. 4.

[24]Berlo, Ibid., p. 52.

county staff members. The specialist wants county workers to use his or her programs at the county level.

In a communication model presented by Berlo, the elements of source, message, channel and receiver are required to accomplish fidelity of communication or getting what the communicator wants.[25]

Fidelity can be analyzed by looking at least four factors: communication skills, attitudes, knowledge level, and position within a social-cultural system--all these factors being variables within both the sender and the receiver.

The subject-matter specialist has as his immediate program audience, the county extension staffs. He would be concerned with these four factors of fidelity as they effect his audience. The specialist is concerned with what he can do to increase the knowledge level as well as improve the attitude of his audience, and hence improve chances of audience behavioral change (adopting his program).

And so it is suggested in this study that if a specialist could provide the subject-matter material, the training, program sales tools, audio-visual supplies, lesson plans and evaluative procedures, the attitude of the county staff member toward the program would improve, his knowledge level would improve, and his skill in communicating would improve. Result of such improvements might as well be a higher likelihood of program adoption. Program adoption, however, could depend on preceived reward from adoption.

Schramm makes a distinction between messages that have as their

---

[25]Berlo, Ibid., pp. 40-70.

purpose "immediate" or "delayed" reward.[26] Some messages have a built-in reward such as comic strips. Other messages have rewards that would come about at some future time.

Berlo calls delayed-reward messages "instrumental."[27] That is, the reward to the receiver is dependent upon use of the message content. The rewards are delayed until he can use what he has received in doing something else.

It would seem the specialist would need to keep that purpose of instrumentality in mind as he presents his program to the agent in the field. The specialist wants the agent to do something further with the information he receives; namely, he wants that agent to conduct educational events. If the specialist's messages, as perceived by the agent, are incomplete, or if the messages do not contain enough information for the agent to complete the tasks, friction or dissatisfaction may occur between the source and the receiver. On the other hand, if messages are complete, understandable and fully instructive as to further actions being requested, the possibility of satisfaction with perceived delayed reward is increased.

A Praxis Report deals very closely with this concept of instrumentality and with the problems associated with employee training. The Report says that "as dispensers of the 'training pill' have learned, it is usually expensive but not always effective."[28]

---

[26]Wilbur Schramm, "The Nature of News," Journalism Quarterly, Vol. 26 (1949), pp. 259-269.

[27]Berlo, Ibid., pp. 18-19.

[28]Praxis Corporation, Praxis Reports (New York, 1970).

This Report goes on to say that ineffective training may be the result of two things; the trainee may feel the task the trainer requests is punishing. Additionally, the trainer may not provide for necessary feedback.

In the case of perceived punishment, all too often the trainer fails to provide enough instruction, material and personal help for the trainee to accomplish the task in relation to perceived possible rewards. The result may be that task performance is shoddy, incomplete or not undertaken.

And in the case of little or no feedback, the trainer simply does not listen to the real and implied statements of the trainee. Instead, the trainer, in effect, "only has something to tell the trainee." The trainer fails to understand that the trainee can accomplish the task because of what the trainer does.

The Praxis article seems directly applicable to the specialist's role in creating and distributing educational programs for county staff use. As a trainer of agents, the specialist is in a position to create a possible punishing situation as perceived by the agent. The specialist may ask the agent to conduct an educational program in the specialist's area, and fail to provide sufficient instruction, material and personal assistance. The specialist also may fail to provide the feedback link and not "hear" the developing situation.

Selling

In presenting an educational program for agent adoption, the specialist may be seen as selling the program to the agent. The specialist actually wants the agent to adopt the required role to plan,

organize, promote, present and evaluate the specialist's program on a county level.

If we look briefly at the process involved in selling an article, a concept or a service, Beckley points out that four identifiable steps are involved. These steps include: (1) determination of a prospective client's needs, (2) showing that prospect what the salesman has to sell, (3) proving the product will satisfy the needs--real and imagined--of the client, and (4) asking for the order.[29]

This selling process, it seems, entails providing just what the audience member must have to satisfy a need known to both the salesman and the client. Inherently the salesman (or specialist) first must determine needs. Then he must make an effort to insure he is providing ideas, tools and materials to fill the needs. The next steps are showing and proving that the needs can be fulfilled. And finally, the "salesman" asks the prospective client to buy.

(There is a story in which a young, new country feed salesman, eager to make a sale, excitedly told a farmer about the sale on pullet feed which his company was promoting. The salesman, never stopping to get facts from the farmer, told of the high quality of the feed, of the bargain price, and of the quick delivery, and asked the farmer to buy a ton. To this the perplexed farmer replied, "Sounds great. Too bad I sold my pullets a month ago!")

The specialist must serve the client--in this case the county extension agent--by determining needs in the total area of his program, including not only subject-matter information, material and formal

---

[29]John L. Beckley, Let's Sell, (New York: Prentice-Hall, 1950).

training, but also the needs the county worker feels he has in all other areas of planning, promoting, and conducting the program.

A good specialist, like any salesman who provides needs, goods and services fulfills a well-defined role.

When neither the salesman nor the specialist provides necessary goods and services to meet all his client's needs, role conflict, friction and dissatisfaction result.

In 1971, James Hightower, head of the Agribusiness Accountability Project, funded by Chicago's Field Foundation, wrote a book entitled Hard Tomatoes, Hard Times.[30] The book was highly critical of research and extension work by the Department of Agriculture. Hightower attacked three areas of performance: (1) Spending too much time cozying with elite farmers and agribusiness men, ignoring the displaced poor, (2) taking agribusiness grants into public laboratories to perform research which mainly benefits private firms, and (3) tolerating discrimination which has deprived Negro Land-Grant Colleges from research funds and cheating black farmers from extension's help.[31]

Hightower's book has met with a great deal of shock and denial. Progressive Farmer, in an editorial September, 1972 said, "While Extension's first responsibility is to agriculture, it may be difficult for farm people to establish a claim to all its services. Land-Grant colleges were established to serve not only agriculture but also other

---

[30]James Hightower, Hard Tomatoes, Hard Times: The Failure of the Land Grant College Complex (Washington, D.C.: Agribusiness Accountability Project, 1972), p. 308.

[31]Jack Kiesner, "Butz, 'Hard Tomatoes, Hard Times' Author Disagree on Land Grant Role in Agriculture," Feedstuffs (Minneapolis: Miller Publishing Co., June 26, 1972), p. 2.

scientific fields. There is no sound reason why a land grant college shouldn't use the extension method in serving other areas of our society." Further, the editorial stated that agriculture has a right to insist that the extension service not spread itself too thin, and that any urban program should be funded adequately.[32]

The effects of Hard Tomatoes, Hard Times were only slight as a continuing and newsworthy item in the nation's press, but the seeds were planted between its covers. Extension should serve more people with more helpful educational programs. And that meant more work at the county level, and more help from the specialist staffs.

Less spectacular than Hightower, Algo Henderson, in his book, The Innovative Spirit, emphasized extension's possible future role. "I also envision programs which speak to the present needs of the entire community on a less significant level. An experiment is the store-front education center such as the Cooperative Extension Urban Center in Buffalo."[33]

A joint publication of the Department of Agriculture and the National Association of State Universities and Land Grant Colleges prepared in 1968, entitled "A People and a Spirit," called for extension to expand its efforts in agriculture and related industries, in social and economic development, in quality of living, in international extension and in helping the disadvantaged and alienated of America

---

[32]"The Future of Extension--Rural or Urban," Progressive Farmer editorial" (September, 1972), p. 90.

[33]Algo D. Henderson, The Innovative Spirit (San Francisco: Jossey-Bass, Inc., 1970).

join the mainstream.[34] The report makes special mention of the need to increase the use of specialists holding joint research, teaching and extension appointments, and need and the opportunity for county extension centers to increase educational opportunities for an increasing number of audiences are obvious.

The Problem

This study was concerned with determining if differences do exist in role prescriptions, role descriptions and role expectations of subject-matter specialists as perceived by specialists and county staff members of OSU Extension. The study focused on comparing these role perceptions as related to the specialist's educational program. Are there differences in role expectations by agents and specialists as to the specialist's role in providing an educational program for county extension workers to use?

It was shown previously that educational programs presented at the county level go through five definable stages, e.g., need determination, resource allocation, program selling, program presentation and program evaluation. It was shown also that the county extension agents spend a great amount of time in the work involved in these five stages. Along with this is the need for county workers to provide more educational programs for more people.

It would seem, then, that the subject-matter specialist's role could fit into the five stages of program planning as far as the

---

[34] Joint USDA-NASULGC Study Committee on Cooperative Extension, A People and A Spirit (Fort Collins, Colorado: Printing and Publications Service, Colorado State University, 1968).

specialist's program was concerned. In other words, the specialist could provide services in each of the planning stages as follows:

1. Need Determination. The specialist could assist the county worker in detecting national, state and local trends in the particular subject-matter area. The specialist could also help in the methodology of determining needs through production of needs survey instruments.

2. Resource Allocation. In this stage, the specialist could provide bulletins, fact sheets and other printed material along with lists of other subject-matter resource material that is currently available.

3. Program Selling. Here the specialist could provide, along with the specialist's program, materials for the county worker to gain an audience for the program. Materials would include announcement brochures, program promotion plans, slide/tape promotional materials and radio and newspaper promotional materials.

4. Program Presentation. At this stage, the specialist could produce and distribute with the program, teaching plans, as well as teaching materials in the form of charts, slide/tape or videotape lessons and lesson guidelines.

5. Program Evaluation. The specialist could provide plans and instruments for the agent to use in determining whether the educational program had reached its goal and resulted in audience change.

One of the role prescriptions of the subject-matter specialist in OSU Extension is to provide an educational program for county use. Role expectations of the specialist as held by specialists and county extension agents may vary. It was the purpose of this study to determine if role expectations would vary among individuals if the subject-matter specialist would provide services and materials in each of the five stages just described.

For purposes of this study, the overall behavior of the specialist was termed the specialist's role. Each of the five areas which related to the program planning work was called role aspects.

Were there differences in the way in which individuals, both specialists and county extension agents, perceived the way in which the specialist could fill each role aspect? Would individuals, specialists and county extension agents, place different priorities on a specialist's filling each role aspect?

It should be remembered that the foregoing considerations of a specialist's role goes far beyond what is generally practiced. Usual procedure is to provide a quantity of subject-matter information in the form of bulletins, fact sheets, or a notation of suggested references. Formal training sessions in the subject-matter are provided in nearly every case. In a few instances, lesson plans, along with visual aids in the form of movies, slides or instruction as to where material can be ordered are provided. But the inclusion of materials and aids covering all five phases of program planning and presentation has been rare.

Purpose of Study

The purpose of this exploratory study is to attempt to build a descriptive profile of the relationships between specialists' perceptions of their roles and field staff members' role expectations.

Need for Study

There certainly is always a need to study role relationships between people in an organization, with an eye to improving those relationships. Likewise, there is always the need to attempt to determine the most favorable way or ways in which the extension subject-matter specialist can be of most service to extension educators in the

field.

The author has a personal and a professional interest in this study. During the summer of 1973, the opportunity arose to assist extension agriculture economics specialists in "selling" their program. The program, "LF-Farm" (a computerized linear programming technique for advance-farm planning and income maximization) was to be presented for adoption and use as an educational program by county extension directors. These directors would then sell the program, a several-day educational workshop, to farmers.

The author, a communications training specialist with OSU Extension, helped his co-workers in agriculture economics devise a complete "educational and sales kit" for county directors to use in selling the workshop program to farmers, which included a plan that the county directors could use to sell the workshop, a slide/tape promotional tool, program advertisements for newspapers, news releases, suggested personal letters to farmers and bankers, selling ideas, and complete subject-matter information in easy-to-read form.[35]

Then, in addition to the program kit, a number of training sessions were conducted for county directors. At these sessions, directors were trained in the use of all parts of the kit.

After the training session, county directors were asked to register their opinions of the entire LP-Farm program, including the training, the kit, and the basic idea of using computers to speed farm enterprise decision making. Comments were quite favorable: "It's

---

[35]William L. Brant and Robert F. Reisbeck, "A Suggested Planning Guide With Promotional Material For Conducting LP-Farm Workshop," Oklahoma State University Agriculture Extension publication AE7305, 1973.

about time someone told us how to sell a program." "It really ought to work." "You boys have done your homework." "Why can't all specialists give us complete program kits?"

This survey lays no claims to external validity, nor does it give information about certain aspects of the role of a specialist. However, as a result of the LP-Farm promotion, farmer workshops have been conducted in thirty-five counties of Oklahoma, and more than two-hundred farmers have adopted the linear programming methods for forward planning of their enterprises.

Because of the success encountered in getting agent adoption of this education program, and because the program did contain materials aimed at helping agents in all five program planning areas, this study is an attempt to pursue the subject further, and to attempt to build a descriptive profile of the relationships between specialists' perceptions of their roles and field staff members' role expectations.

CHAPTER II

METHODOLOGY: DESIGN AND ANALYSIS

Since the present study was not one of participant observation and rating of OSU Extension specialists' roles, statements comporting to the five aspects of their roles were prepared and submitted to respondents to register their degree of agreement.

The specialists' role was subdivided into the following five areas of behavior:

1. Need Determination (ND). This aspect is the specialist's analysis of trends and needs within his subject-matter area, both from a national and statewide standpoint, and the determination of program needs based on that analysis.

2. Resource Allocation (RA). This aspect includes the specialist's formal subject-matter training sessions for the county workers, as well as distribution of subject-matter material--pamphlets, brochures, fact sheets and bulletins. Resource allocation, as a specialist would see it, is allocation of material and time for subject-matter orientation and training of county extension agents in the specialist's program.

3. Program Promotion (PP). This aspect includes the creation by the specialist of a plan and accompanying materials to enable the county worker to "sell" the specialist's educational program, thereby gaining a county audience. Included would be a "master sales plan," news releases, radio tapes, samples of letters, slide/tape or videotape promotional pieces and program brochures.

4. Program Teaching (PT). In this aspect of the specialist's role, the specialist would create program lesson plans, meeting guidelines and audio-visual material for agents to use.

5. Program Evaluation (PE). This role aspect would include the specialist's making available, with the educational program, a means or instrument by which the county staff member could evaluate the effectiveness of the specialist's program which the county worker had presented.

Items Sample

These five behavioral aspects of the specialist's role served as independent variable levels. Ten statements serving as indicants of each role aspect were compiled, resulting in a 50-item input for the participants.[1] The fifty "role statements" were rank-ordered along a nine-pile, quasi-normal Q-distribution with an agree-disagree dimension, as follows:

Most Agree									Least Agree
Number of Items	2	3	5	9	12	9	5	3	2
Pile Number (Item Value)	9	8	7	6	5	4	3	2	1

In Q-technique, respondents rank-order items in piles. For example, in this study, the two items which a respondent most agreed with were placed in Pile Number 9; the one with which he least agreed in Pile Number 1, etc. An item's value is determined by the pile in which it is placed.

This study's fifty items comprised a structured Q-sort, as opposed to an unstructured Q-sort. That is, each item comported to one of the

---

[1]The fifty statements in this set were gathered from a number of interviews with specialists and with members of the field staff, from extension job descriptions, from studies of specialist's roles, and from readings on roles that specialists can and might play. An original pool of 100 statements were constructed, and subsequently, three judges (persons who are members of the extension organization) selected the final fifty, verifying their applicability and pertinence to each of the variable levels in the study.

five aspects of a specialist's role. In an unstructured sort, the statements would be placed in piles without regard to the respective role aspect.

With the structured sort, degree of agreement toward each role aspect could be measured, analyzed and interpreted. That is, one could determine, for example, if the specialists' activities described in items comporting to Need Determination drew higher agreement than did statements about Resource Allocation activities.

In essence, then, the researcher sought to determine relative agreement on stated activities of Extension subject-matter specialists--activities that related to the five role aspects. Participant agreement with activity statements indicated what they thought the specialist could or should be doing and/or what he is doing.

The "could-should" and/or "is" aspects of the respondent agreement response is noted for this reason: Most statements ask participants to respond to "could-or-should" statements, but some statements could be interpreted as descriptive. For example, under the Program Promotion sub-role (Appendix A), Item Number 2 reads: "County staff members are not salesmen and really do need help from specialists in promoting programs." This item asks the respondent to what degree he agrees with what the specialist should or needs to do.

Item Number nine, on the other hand, could be seen as asking for agreement on a descriptive statement of what specialists are or have been doing: "For years, specialists have told the field staff how important their program is, but they have failed to tell them how to promote it and to provide tools for promotion with the public. It seems important they do so."

Thus, in interpreting findings, the reader should note that mean agreement scores refer both to what the specialists have done, or are doing, and what they should do.

Analysis

Q-methodology especially was appropriate for this study in which only fourteen persons--seven OSU Extension subject-matter specialists and seven county extension directors--participated.

As Kerlinger has pointed out:

> It (Q-methodology) is not well suited to testing hypotheses over large numbers of individuals, nor can it be used too well with large random samples. One can rarely generalize to populations from Q-person samples. . . Rather, one tests theories on small sets of individuals carefully chosen for their "known" or presumed possession of some significant characteristic or characteristics.[2]

In this study, the researcher obtained responses to fifty representative statements from each of fourteen respondents.

Seven subject-matter specialists of both sexes were chosen from different disciplines: family living, agriculture, 4-H, and community resource development. County directors were drawn from large and small, rural and urban counties.

These "known" differences in respondents are important in Q-methodology to help determine if such characteristics help explain any differences in types of people who, among themselves, show similar responses. In this study, for example, the investigator not only was interested in differences between agreement of county directors and subject-matter specialists on role activities of the latter. He

---

[2]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, 1964.)

was asking if the specialist's area of discipline or sex made a difference. Likewise, for the size and type of county to which the director was assigned.

A two-part design and analysis provided the basic information. First, an "items-by-persons" Q-matrix of item ranks was correlated and factored. By considering items as the usual tests in such designs, factors of persons were extracted from person-intercorrelations to tell which respondents showed similar agreement on the fifty items, overall.

The types of persons, then, served as an additional independent variable which was incorporated into a Lindquist Type I, two-factor, mixed design with repeated measures on the five role aspects of the specialists.

This phase of the analysis not only showed the difference in participants' mean agreement on activities comporting to each of the five role aspects, but indicated which respondents most similarly agreed to which activities.

In other words, if specialists and field staff members differentially agreed on various aspects of the specialist's role, the researcher could pinpoint on which aspects they differed. Thus, future decisions by specialists could be designed to bring role description and expectation more into harmony.

The Type I design treats the fifty items as persons and persons as items, just opposite of the common psychrometric designs which deal with a small number of items and a large sample of persons. Such discovery-type designs are extremely valuable in small-scale research

in which the investigator tries to spot the scope and nature of communication gaps, such as the present study seeks to do.

In the following chapter, findings of the study will be presented and analyzed.

CHAPTER III

FINDINGS

One of the problems in this study was to determine if groups of extension workers could be identified and isolated, the members of which hold similar views as to the role of the extension subject-matter specialist. The fourteen participating extension service employees (seven county directors and seven subject-matter specialists) ranked fifty statements of a 9-point quasi-normal distribution continuum.

Agreement on Role Activities

Correlation and elementary linkage and factor analysis were used to extract clusters of respondents. Factor analysis indicated which employees showed similar degrees to agreement on activities representing five different aspects of the subject-matter specialist's role.[1]

Agreement scores of each respondent to the fifty role activity items were intercorrelated. The Q-matrix of intercorrelations shown in Table I served as the basis to identify types of respondents who similarly agreed on the subject-matter specialist's role activities, as described in the fifty items. The method of identifying types or

---

[1]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, 1966), p. 650.

clusters of respondents was developed by McQuitty.[2]

McQuitty's factor analysis begins with the correlation matrix. In Table I, each underlined correlation is the highest in its respective column. That underlined correlation identifies the person that is most like that person for that column. Next, the highest underlined entry in the matrix is selected--in this case, r = .85 between respondents 12 and 13. These form what McQuitty called a reciprocal pair, or those two respondents who have the highest correlation with each other. To the reciprocal pair, then, are linked other respondents who are more related to them than to any subsequent reciprocal pair.

In this study, three types of extension employees were identified through factor analysis. Type I included respondents 10, 11, 12, 13 and 14; all county extension directors. Type II included respondents 1, 2, 3, 4, 5, and 7; all subject-matter specialists. And Type III included 6 and 8; a county director and a specialist. These three types are shown in Figure 1.

In elementary linkage and factor analysis, each respondent type has a typal representative; that is, a member who is most representative of all members. The typal representative is identified from the intercorrelations of typal members.

To illustrate, Table II shows the intercorrelations of the six members of Type I. Furthermore, Respondent 12 has the highest total correlation with all other members (3.52). He, then, is the typal representative. A description of the typal representative's high and

---

[2]L. McQuitty, "Elementary Linkage Analysis for Isolating Orthogoral and Oblique Types and Typal Relevancies," Educational and Psychological Measurement, XVII (1957), pp. 207-229.

TABLE I

INTERCORRELATIONS* OF FOURTEEN OSU EXTENSION EMPLOYEES' DEGREE OF AGREEMENT WITH THE SUBJECT-MATTER SPECIALIST'S ROLE AS DESCRIBED IN FIFTY Q-ITEMS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1		.58	.49	.46	.51	.03	.49	.10	.15	.06	.35	.27	.28	.06
2	.58		.66	.69	.69	.25	.75	.02	.16	.18	.37	.22	.30	.09
3	.49	.66		.68	.71	.17	.58	.12	.11	.07	.18	.03	.08	.01
4	.46	.69	.68		.73	.28	.68	.27	.22	.12	.28	.18	.29	.13
5	.51	.69	.71	.73		.14	.76	.19	.16	.12	.24	.20	.20	.00
6	.03	.25	.17	.28	.14		.15	.73	.66	.49	.60	.47	.46	.51
7	.49	.75	.58	.68	.76	.15		.11	.28	.34	.28	.26	.43	.20
8	.10	.02	.12	.27	.19	.73	.11		.65	.47	.56	.63	.57	.52
9	.15	.16	.11	.22	.16	.66	.28	.65		.67	.67	.67	.59	.61
10	.06	.18	.07	.12	.12	.49	.34	.47	.67		.64	.80	.72	.49
11	.35	.37	.18	.28	.24	.60	.28	.56	.67	.64		.70	.66	.47
12	.27	.22	.03	.18	.20	.47	.26	.63	.67	.80	.70		.85	.50
13	.28	.20	.08	.29	.30	.46	.43	.57	.59	.72	.66	.85		.51
14	.06	.09	.01	.13	.00	.51	.20	.52	.61	.49	.47	.50	.51	

*A coefficient of .288 or higher exceeds chance expectations 95 out of 100 times ($p < .05$)

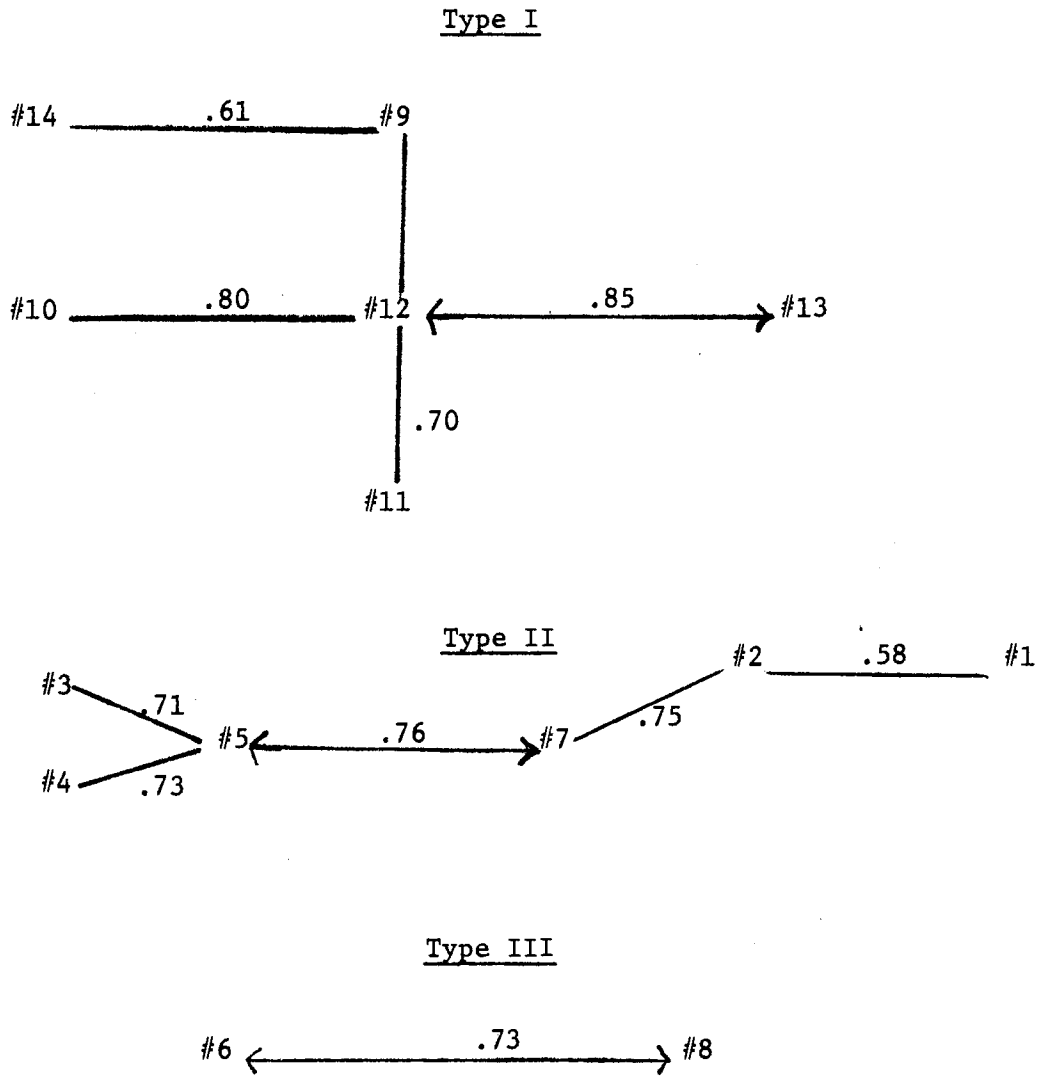


Figure 1. Three Types of OSU Extension Employees Identified by Similar Degrees of Agreement on the Subject-Matter Specialist's Role as Described in Fifty Q-Statements.

TABLE II

INTERCORRELATIONS OF TYPE I RESPONDENTS' AGREEMENT ON THE SUBJECT-MATTER SPECIALIST'S ROLE AS DESCRIBED IN FIFTY ROLE ACTIVITY ITEMS

	#9	#10	#11	#12	#13	#14
# 9		.67	.67	.67	.59	.61
#10	.67		.64	.80	.72	.49
#11	.67	.64		.70	.66	.47
#12	.67	.80	.70		.85	.50
#13	.59	.72	.66	.85		.51
#14	.61	.49	.47	.50	.51	
	3.21	3.32	3.14	3.52	3.33	2.58

Typal Representative: #12

low agreement profile gives a rough indication of all Type I's agreement profile.

The representative of Type II was identified in like procedure. He was respondent 5. Since Type III comprised only the reciprocal pair of respondnets Numbers 6 and 8, either one qualified as the typal representative.

Table III represents what is called a factor matrix in standard factor analysis. The column figures represent correlations of each respondent with the typal representative. The underlined coefficients represent the highest correlation in each row and identify the Type to which the respondent belongs.

TABLE III

CORRELATION OF EACH RESPONDENT WITH EACH TYPE OF RESPONDENT ON AGREEMENT WITH THE SUBJECT-MATTER SPECIALIST'S ROLE AS DESCRIBED IN FIFTY ACTIVITY ITEMS

	Type I (#12)	Type II (#5)	Type III (#6)
#1	.27	<u>.51</u>	.03
#2	.22	<u>.69</u>	.25
#3	.03	<u>.71</u>	.17
#4	.18	<u>.73</u>	.28
#5	.20	<u>1.00</u>	.14
#6	.47	.14	<u>1.00</u>
#7	.26	<u>.76</u>	.15
#8	.63	.19	<u>.73</u>
#9	<u>.67</u>	.16	.66
#10	<u>.80</u>	.12	.49
#11	<u>.70</u>	.24	.60
#12	<u>1.00</u>	.20	.47
#13	<u>.85</u>	.30	.46
#14	.50	.00	<u>.51</u>

Essentially, the same typal members are shown in Table III as in Table II, except Number 14 is correlated about equally with Types I and III. He could be considered aligned with either type. Respondent Number 11 also has "mixed allegience." Though he correlates highest with Type I, he has a comparatively high correlation with Type III ($r = .60$). Otherwise, various respondents seem to identify strongly with only one of the three types.

A detailed profile of each type's members will follow in the context of discussing differences between agreement on the activities comporting to each of the five role aspects.

Perceptual Differences on Role Activities

Three types of extension respondents were identified on commonality of agreement with the extension subject-matter specialist's role activities. The task then was to determine on what aspects the types were like themselves but different from other types in perception or agreement on role activity description.

Put another way: Were there significant differences in the ways in which the three types agreed or placed priority on the five role aspect areas of Need Determination, Resource Allocation, Program Promotion, Program Teaching and Program Evaluation?

Additionally, it was necessary to deal with differences that existed between the way all three behavioral types placed priority on each of the five aspects of the specialist's possible role.

First, the investigator looked for differences in degree of agreement with described activities comporting to the five role aspects. Next, he identified apparent interactions of types of respondents with

degrees of agreement on various role aspect activities. For example, did the total agreement with Resource Allocation activities hinge on one type of respondent more than another?

Differences in Role Aspects

Table IV shows mean agreement scores of each type of respondent with activities in each of the five role aspect areas. The paradigm clearly shows that Resource Allocation activities drew substantially higher agreement (M = 7.01) than any other role aspect. This held true across all three types of respondents, since each type's mean agreement score on Resource Allocation exceeded that for any other role aspect. The next highest agreement index was on Program Teaching (M = 4.32); and Program Evaluation (M = 4.15).

Variance analysis showed that there was a significant difference between the highest and the lowest mean agreement score. ($F = 16.66$ $/\overline{p < .01}/$. A difference as large as this could result by mere chance fewer than 1 time in 100 trials.) Subsequent "gaps" tests indicated no significant difference between Need Determination and Program Evaluation and between Need Determination and Program Promotion mean agreement scores. All other differences between mean agreement scores between role aspects were significant. ($/\overline{p < .05}/$ which means that differences as large as these could result by mere chance fewer than 5 times in 100 trials.)

More important than the overall picture was the relative agreement of various types of respondents with different role aspect activities. Who did the types comprise? Did subject-matter specialists cluster together in their agreement? Extension directors? If so, on what role

aspects did each type most agree upon? By looking at each type of respondent separately, the investigator could pinpoint perceptual gaps that could figure greatly in future role activity decisions. Consequently, communication gaps, if they exist, could be narrowed.

TABLE IV

MEAN AGREEMENT SCORES OF EACH TYPE OF RESPONDENT WITH FIVE ROLE ASPECTS

	Type I	Type II	Type III
Need Determination	3.43	5.07	4.75
Resource Allocation	6.98	7.08	6.90
Program Promotion	5.43	3.00	6.00
Program Teaching	5.57	4.43	4.75
Program Evaluation	3.57	5.25	2.60

Type I Respondents

All Type I respondents were county extension directors. Their representative was respondent Number 12, a director in his mid-thirties who heads the extension program in a semi-urban county seat community. In an interview, he said he was concerned with providing a growing program consisting of educational opportunities for more groups, both rural and urban.

This director said he needed to rely more and more on help from specialists in the Program Teaching area, especially with slide/tape

presentations and other visual aids.

During the interview, this director said the subject-matter specialist's job was going to be one of selling and providing teaching services, particularly as available time was being diminished by more work in productive programs at the county level.

Table IV indicated that Type I showed the second highest agreement with Resource Allocation items (M = 6.98). However, this did not distinguish his priorities. Types II and III also showed high agreement with these activities. Further breakdown of Table IV gives more specific insight into Type I's perceived role of the subject-matter specialist.

Compared with the six subject-matter specialists in Type II, the six extension directors in Type I showed slightly less agreement with Resource Allocation activities (M = 6.98 and M = 7.08 respectively), as shown in Table V.

TABLE V

MEAN AGREEMENT OF TYPE I AND TYPE II RESPONDENTS ON EACH OF THE FIVE ROLE ASPECTS AS DESCRIBED IN FIFTY ROLE ACTIVITY ITEMS

Role Aspect	Type I	Type II	Mean Difference
1. Resource Allocation	6.98	7.08	- .10
2. Program Promotion	5.43	3.00	+2.43
3. Program Teaching	5.57	4.43	+1.14
4. Program Evaluation	3.57	5.25	-1.68
5. Need Determination	3.43	5.07	-1.64

Rows three and four of Table V suggest that Type I (extension directors) agreed more with Program Teaching and less with Program Evaluation (M = 3.57) than did Type II subject-matter specialists. Furthermore, the county directors agreed less with Need Determination role activities (M = 3.43) and more with Program Promotion (5.43) and Program Teaching activities (M = 5.57) than did subject-matter specialists (M = 4.43).

The largest gaps of perceived role activities occurred in the Program Promotion (M = 2.43), Program Evaluation (M = 1.68) and Need Determination aspects (M = 1.64). To pinpoint further these perceptual gaps, the investigator examined the three items under each role aspect on which Type I and II most differed. Table VI lists the items under each aspect and the mean perceptual differences.

TABLE VI

ROLE ACTIVITY ITEMS ON WHICH RESPONDENT TYPES I AGREED LESS THAN DID TYPE II ON THE SPECIALIST'S ROLE

Role Aspect	Mean Difference*
Program Promotion	
Must Help Sell Program	+2.5
Must Tell Field How to Promote and Provide Needed Tools	+2.3
Must Sell Program	+1.6
Program Evaluation	
Evaluation Guideline to Improve Teaching	-1.9
Assist in Evaluation	-1.5
Provide Measures of Effectiveness	-1.4

TABLE VI (Continued)

Role Aspect	Mean Difference*
Need Determination	
Plans Programs for Needs, Desires of Public, County Workers	-1.5
Training Prepares Specialist to Determine Public's Needs	-1.5
Leader in Statewide Need Analysis	-2.0

*Plus means Type I's mean agreement was greater than Type II's. Minus means Type II's agreement was greater.

Type I, extension directors, agreed more than did extension subject-matter specialists (Type II) that the specialist not only must sell the programs to agents, but help the agents sell the programs to the public. The directors did not agree as much as did specialists that Program Evaluation and Need Determination items were of as great priority.

Type II Respondents

Type II respondents were extension subject-matter specialists. Their representative was respondent Number 5. This specialist was formerly a county agent, but he has been a specialist in his field for nearly twelve years, having earned a terminal degree in that area. In filling his role, the respondent said he sees the specialist providing reports, fact sheets and other subject-matter material to help county workers orient themselves to the subject. However, he did not see the

need to provide program sales material or lesson plans because there really was no need to "spoon feed" educators in county offices; building a program to fit local needs from specialist's subject-matter information was the job of those in the field. Besides, complete programs which include suggested sales, teaching and evaluative material might create too structured a program.

Table VI showed that Type II differed with Type I mostly in Type II's lower agreement on Program Promotion and Program Teaching. He showed higher agreement on Program Evaluation and Need Determination activities.

In comparing Type II with Type III respondents, Table VII indicates that Type II had higher agreement on Need Determination (M = 5.07) and Program Evaluation (M = 5.25). Type II had a lower agreement on Program Planning and Program Teaching (M = 3.00 and 4.43 respectively).

TABLE VII

MEAN AGREEMENT OF TYPE II AND TYPE III RESPONDENTS ON EACH OF THE FIVE ROLE ASPECTS AS DESCRIBED IN FIFTY ROLE ACTIVITY ITEMS

Role Aspect	Type II	Type III	Mean Difference
1. Resource Allocation	7.08	6.90	+ .18
2. Program Promotion	3.00	6.00	-3.00
3. Program Teaching	4.43	4.75	- .32
4. Program Evaluation	5.25	2.60	+2.65
5. Need Determination	5.07	4.75	+ .32

The largest gaps between Type II and Type III occurred in the Program Promotion (M = 3.00) and Program Evaluation (M = 5.25) aspects. To obtain the most accurate view of those differences between Type II, specialists, and Type III, one specialist and one director, Table VIII shows activities under those two role aspects in which most differences were found.

TABLE VIII

ROLE ACTIVITY ITEMS ON WHICH RESPONDENT TYPE II AGREED LESS THAN DID TYPE III ON THE SPECIALIST'S ROLE

Role Aspect	Mean Difference*
Program Promotion	
County Workers Are Not Salesmen	-2.3
Specialists Must Prepare Promotional Material	-4.5
Specialists Must Help Sell	-4.7
Program Evaluation	
Specialists Can Help Provide Uniform Measures of Effectiveness	+3.3
Specialists Will Learn More By Helping Evaluate Programs	+3.5
Specialists Must Help Agents Make Judgement of Evaluation	+3.3

*Plus means Type II's mean agreement was greater than Type III's. Minus means Type II's mean agreement was greater.

Type II respondents were least in agreement with those items of Program Promotion related to their need to help sell programs and

provide promotional material. Type II respondents, on the other hand, agreed most with the aspect of Program Evaluation: helping agents evaluate program effectiveness by providing uniform means of measurement.

Type III Respondents

Type III respondents included one county director and one specialist. Both persons were young. Yet they had been working in extension for more than five years. Both said they perceived the need for an active thrust by everyone in the organization to get lay-people actively involved in quality education programs.

It has been shown that Type III respondents differed from Type II to the greatest extent in the areas of Program Promotion and Program Evaluation, with Type III having higher agreement on the former and lower agreement on the latter activities.

Compared with Type I, Type III had lower agreement with Program Teaching (M = 4.75) and Program Evaluation (M = 2.60), as shown in Table IX. Type III had higher agreement on Need Determination (M = 4.75) and Program Promotion (M = 6.00). The most significant gap between Type III and Type I was in the area of Need Determination.

The greatest gap in the perceptions of Types III and I was in Need Determination. Table X presents those specific items on which most differences occurred in the Need Determination role aspect.

It can be seen that Type III, one director and one specialist, agreed more with the Need Determination aspect than did Type I, county directors. Type III saw the specialist's role in that aspect as planning programs based on real needs. Failure of educational programs to

meet goals, according to Type III, results largely from a lack of determining people's needs.

TABLE IX

MEAN AGREEMENT OF TYPE III AND TYPE I RESPONDENTS ON EACH OF THE FIVE ROLE ASPECTS AS DESCRIBED IN FIFTY ROLE ACTIVITY ITEMS

Role Aspect	Type III	Type I	Mean Difference
1. Resource Allocation	6.90	6.98	+ .08
2. Program Promotion	6.00	5.43	- .57
3. Program Teaching	4.75	5.57	+ .82
4. Program Evaluation	2.60	3.57	+ .97
5. Need Determination	4.75	3.43	-1.32

TABLE X

ROLE ACTIVITY ITEMS ON WHICH RESPONDENT TYPE III AGREED LESS THAN DID TYPE I ON THE SPECIALIST'S ROLE

Role Aspect	Mean Difference*
Need Determination	
Program Failure Due to Lack of Need Determination	+2.3
Specialists Plan Their Programs By Determining Real Needs	+1.8
Specialists Need to Determine Needs	+1.5

*Plus mean Type III respondents' mean agreement was greater than Type I's.

Table XI shows the mean agreement of each respondent type with each role aspect in rank order. The rank positions help determine each respondent type's identifying agreement characteristic. All types similarly agreed most strongly on the specialist's Resource Allocation activities. From there on they differed.

TABLE XI

MEAN AGREEMENT AND RANK POSITION OF MEAN AGREEMENT OF THREE RESPONDENT TYPES TO EACH OF FIVE SPECIALIST ROLE ASPECTS AS DESCRIBED IN FIFTY ROLE ACTIVITY ITEMS

Role Aspect	Type I		Type II		Type III	
	Mean	Rank	Mean	Rank	Mean	Rank
Resource Allocation	6.98	1	7.08	1	6.90	1.0
Program Teaching	5.56	2	4.43	4	4.75	3.5
Program Promotion	5.43	3	3.00	5	6.00	2.0
Program Evaluation	3.56	4	5.25	2	2.50	5.0
Need Determination	3.43	5	5.07	3	4.75	3.0

Summary

Three behavioral types of extension respondents were isolated based on commonality of agreement with extension subject-matter specialists role activities. Type I respondents were county extension directors. Type II respondents were all specialists. Type III included one director and one specialist.

By isolating these types of respondents and then by pinpointing differences that occurred in the types' agreement with the role aspects, it is possible to characterize the respondent types according to those differences in agreement.

For example, the Type I county extension director was the "Individualist Program-Shopper" type. He agreed most with the specialist's role in creating and providing lesson plans, meeting guidelines, etc. But he agreed least with the Need Determination activities in which the specialist would determine program needs. The county directors implied that they would welcome any incoming aid, but they would choose which ones, or parts, thereof, to use.

Type I, county directors, least agreed with Type II specialists on all role aspect activities, except those comporting to Resource Allocation.

Type II, comprising of subject-matter specialists, appeared to be the "Adviser-Evaluator" type. In other words, they saw their role mostly as determiners and evaluators of educational programs. These are role activities the Type I agents least agreed with. Further, Type II specialists least agreed with Program Promotion role activities.

Type III, on the other hand, was a "Public Relations-Extrovert" type. He most agreed with the specialist's role in Program Promotion and least with Program Evaluation activities (introspection). Type III comprised of a subject-matter specialist and a county director. The specialist had once been a county director.

Within limitations of this study, the pattern was clear. Specialists did not see eye-to-eye with county directors on the former's role activities that comported to five role aspect areas.

Neither did the specialists agree with Type III respondents, one of whom was a specialist. However, the Type I county director and the Type III respondent did agree substantially.

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study sought to determine any differences that existed between the way Oklahoma State University Extension subject-matter specialists view their roles and the way county extension directors view those specialists' roles.

The roles in the study were broken into five identifiable areas of educational program planning and implementation. These areas, or aspects, included: (1) Need Determination, (2) Resource Allocation, (3) Program Promotion, (4) Program Teaching, and (5) Program Evaluation.

Data were gathered by Q-technique. Fifty statements describing activities relevant to the role aspects comprised the Q-items. Ten items comported to each of the five aspects. Seven specialists and seven county extension directors were selected as respondents. The Q-sorting involved rank-ordering the fifty Q-items along a nine-pile, quasi-normal agree-disagree continuum. As the statements were sorted according to least agree and most agree, the statements received the value of the pile in which they were placed. All subsequent statistical analyses were based on those values.

Agreement scores first were intercorrelated and linkage (factor) analyzed. This procedure identified three clusters of respondents, each cluster displaying commonality in agreement on role aspect activities. Following intercorrelation and linkage (factor) analysis,

variance analysis was performed to determine if significant differences occurred among degree of agreement assigned to the five role aspect activities.

Three clusters or types of respondents were identified through factor analysis. Type I included six county extension directors. Type II comprised six subject-matter specialists. Type III included one county director and one subject-matter specialist. These types were identified on commonality of agreement with the extension subject-matter specialist's role activities.

Once the types were identified and isolated, it became necessary to determine on what aspects the types were like themselves but different from other types in perception or agreement on role activity description. Were there significant differences in the ways in which the three types agreed on the five role aspects? It also was necessary to determine differences that exist between the way all three behavioral types place priority on each of the five aspects.

Mean agreement scores of each type of respondent show that Resource Allocation activities of specialists received substantially the highest agreement among all behavioral types. All types agree that this is the role aspect of highest priority. The next highest agreement index was Program Teaching, followed by Program Promotion, Need Determination and Program Evaluation.

Type I respondents, all county extension directors, considered Resource Allocation the activity of highest priority. This was followed by Program Promotion, Program Teaching, Program Evaluation and Need Determination.

Type II, all specialists, placed Resource Allocation activities highest, but Type II respondents followed this with Program Evaluation, Need Determination, Program Teaching and Program Promotion.

Type III, one specialist and one county director, considered Resource Allocation most important, followed by Program Promotion, Program Teaching, Need Determination and Program Evaluation.

Conclusions

Since county directors and specialists fell into separate behavioral types, the mean agreement scores clearly show that substantial differences exist in the way that specialists and county directors perceive the role of the specialist. All three respondent types agreed most strongly on the specialist's Resource Allocation activities. From there on they differed.

The county extension director agreed most with the specialist's role in creating and providing program lesson plans, meeting guidelines, etc. But he agreed least with the Need Determination activities in which the specialist would help determine program needs.

Subject-matter specialists saw their role as need determiners and program evaluators; activities with which county directors least agreed.

Type III, made up of one county director and one specialist, did agree most with the specialist's role in Program Promotion and least with Program Evaluation. Overall, Type III agreed substantially with Type I, county directors.

Within the limitation of this study, then, a pattern clearly was shown, which indicated that subject-matter specialists and county

extension directors do not agree as to the order of priorities specialists should give to role activities. This would tend to indicate that differences do exist between the role expectations that different groups within the organization hold. Differences between role descriptions, which are reports of behaviors that are performed by persons in a given role, may also be perceived differently by different groups or persons.

Recommendations

The results of this study were clear-cut in indicating that specialists and field staff members do not see eye-to-eye in the role that specialists should fill in providing subject-matter backup to the county staff member.

It has been shown that substantial differences exist as to the agreement of specialists and county workers in the priorities specialists should give to each of five areas related to program planning: Need Determination, Resource Allocation, Program Promotion, Program Teaching and Program Evaluation.

County extension directors were found to agree that more emphasis should be placed by specialists in providing program promotional material along with more materials to assist in teaching the specialists' programs locally. Specialists placed more priority on program Need Determination and Program Evaluation.

With the substantial disagreement found in the perceptions held by specialists and directors as to the specialist's role, further study is certainly warranted. The current study indicates that there may be real differences in role expectations among extension workers,

and that steps to improve internal communications might be needed.

The author, an extension specialist, has had the opportunity to help other specialists in "selling" their educational programs to county extension audiences. In the instances where specialists have provided program help and services to county workers in all five areas of program planning, the specialists' programs have been more widely used, and county extension agents have expressed appreciation for the "complete package." Yet, on the other hand, a number of subject-matter specialists have expressed misgivings and reluctance in providing such items as promotional material and lesson plans because this was seen to be structuring their program too rigidly, allowing the local agent little chance to deviate from the pattern as the latter sees fit.

This study has shown that differences in role expectations do exist. And in cases, communication breakdown may have resulted. For an organization to accomplish its mission, communication must be established and channels of communication left open. All individuals within the organization must have an understanding of that mission, and they must understand how their roles best can fit in with other roles in the accomplishment of the mission. This is getting organizational role description, role prescriptions and role expectations in line.

Three recommendations are made. First, an ongoing administrative level study of extension role prescriptions and role descriptions might be made in light of the overall extension mission and the extension organizational structure.

Secondly, extension conferences might be held which involve the

entire work force. These conferences could deal with extension's educational goals and the ways in which those goals could be met. The roles of individuals could then be related to the specific programs of the organization with an emphasis placed on matching role prescriptions with role expectations.

Finally, additional channels of communication could be established between specialist and field staff. Subject-matter specialists could use advisory councils composed of county workers. These advisory groups could help establish dialogue, and thereby help all persons determine and fill specific roles as the specialist's program is considered.

BIBLIOGRAPHY

American Association of Agricultural College Editors. Communications Handbook. Danville, Illinois: Interstate Printers and Publishers, Inc., 1970.

Andrews, W. G. "The Role Expectations of the Extension Subject-Matter Specialist in North Carolina as Seen by the Specialist and County Agricultural Agents." (Unpub. PhD dissertation, Cornell University, 1963.)

Austman, Helgi H. "The Functions of Specialists in the Cooperative Extension Service in Wisconsin." (Unpub. master's thesis, University of Wisconsin, 1957.)

Beckley, John L. Let's Sell. New York: Prentice-Hall, 1950.

Berlo, David K. The Process of Communication. New York: Holt, Rinehart and Winston, 1960.

Bernard, Jessie. Social Problems at Midcentury. New York: Drydon Press, 1959.

Blalock, T. C. "Role of the Subject-Matter Specialist." Journal of Cooperative Extension, Vol. 1 (Summer, 1963), 93-100.

Boone, Edgar J. "The Professional Status of Extension Specialists as Compared With Research-Resident Teaching Staff of Selected Departments in Four Land-Grant Institutions." (Unpub. PhD thesis, University of Wisconsin, January, 1959.)

Brant, William L. and Robert F. Reisbeck. "A Suggested Planning Guide With Promotional Material For Conducting LP-Farm Workshop." Stillwater, Oklahoma: Oklahoma State University Agriculture Extension publication AE7305, 1973.

Brown, Emory J. and Albert Deekens. "Roles of the Extension Subject-Matter Specialist." Rural Sociology, Vol. XXIII (September, 1958), 275.

Colorado Cooperative Extension Service. Securing Social Action. Fort Collins: Printing and Publications Service, Colorado State University, 1968.

Evans, J. C. "Program Planning." (Unpub. study, Oklahoma State University, 1966.)

Ham, Don G. "Performance: Goal and Role Ambiguity." (Unpub. PhD dissertation, Colorado State University, 1968.)

Harvey, John J. and Carl N. Scheneman. "The Functions and Procedures of Subject-Matter Specialists in the Missouri Cooperative Extension Service." (Unpub. PhD dissertation, University of Wisconsin, 1959), 48-80.

Helmstadter, G. C. Research Concepts in Human Behavior. New York: Appleton-Century-Crofts, 1970.

Henderson, Algo D. The Innovative Spirit. San Francisco: Jossey-Bass, Inc., 1970.

Hightower, James. Hard Tomatoes, Hard Times: The Failure of the Land Grant College Complex. Washington, D.C.: Agribusiness Accountability Project, 1972.

Joint USDA-NASULGC Study Committee on Cooperative Extension. A People and a Spirit. Fort Collins, Colorado: Printing and Publications Service, Colorado State University, 1968.

Kelsey, Lincoln David and Cannon Chiles Hearne. Cooperative Extension Work. Ithaca, New York: Comstock Publishing Association, 1963.

Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, 1964.

Kiesner, Jack. "Butz, 'Hard Tomatoes, Hard Times' Author Disagree on Land Grant Role in Agriculture." Feedstuffs. Minneapolis: Miller Publishing Co., June 26, 1972.

Lionberger, Herbert F. Adoption of New Ideas and Practices. Ames: Iowa State University Press, 1960.

Loomis, Charles P. and Allan J. Beegle. Rural Sociology: The Strategy of Change. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1957.

Mager, Robert F. Preparing Instructional Objectives. Belmont, California: Feardon Publishers, 1962.

McLean, Malcolm S., Jr. "Systems of News Communication." Communication: Theory and Research. Ed. Lee Thayer. Springfield: Charles C. Thomas, 1967.

McQuitty, L. "Elementary Linkage Analysis for Isolating Orthogoral and Oblique Types and Typal Relevancies." Educational and Psychological Measurement, XVIII (1957.)

Oklahoma State University Extension. University Extension Job Descriptions. (Unpub. administrative policy, 1972.)

Praxis Corporation. Praxis Reports. New York, 1970.

"The Future of Extension--Rural or Urban." Progressive Farmer editorial, 1972, p.90.

Ragle, Dan and Roger G. Barker and Arthur Johnson. "Measuring Extension's Impact." Journal of Cooperative Extension, Vol. V (Fall, 1967.)

Sargent, Stansfeld. "Concepts of Role and Ego in Contemporary Psychology." Social Psychology at the Crossroads. Eds. John H. Rohrer and Musafer Sherif. New York: Harper and Brothers, 1951.

Sax, Gilbert. Empirical Foundations of Educational Research. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968.

Schramm, Wilbur. "The Nature of News." Journalism Quarterly, Vol. 26 (1949), 259-269.

Word, U. G., Jr. "A Study of State Extension Specialist's Role in Program Development in Arkansas." (Unpub. PhD thesis, University of Wisconsin, 1964.)

APPENDIX A

50 Q-SORT STATEMENTS LISTED UNDER RESPECTIVE AREAS OF PROGRAM PLANNING

NEED DETERMINATION (ND)

1. A specialist helps the county extension staff in program planning by determining just what is needed before actual educational programs are designed.

2. The specialist must help determine county program needs before subject matter can be correlated to best serve needs of people.

3. Specialists could provide help to county extension workers by helping them analyze and interpret facts of the local situation and helping them build programs based on these facts.

4. A specialist's program should be based on an analysis of data and other facts which that specialist has helped the county staffs assemble.

5. Failure of a specialist's educational program to be accepted may well be the result of lack of need determination by the specialist and the county staff members.

6. How does a specialist plan his program? By looking at needs and desires of people in cooperation with county workers.

7. The day is long past when specialists can determine people's educational program needs from an office or from a campus. They're going to have to work closely with county extension agents and design programs from field data as to needs.

8. Determining just what people need; that is what technical training especially prepares a specialist for.

9. Truly effective educational programs from specialists cannot be developed without specialists' close cooperation with county extension workers in need determination.

10. The specialist is described as the leader in developing and undertaking a statewide endeavor of need analysis with county extension staffs.

RESOURCE ALLOCATION (RA)

1. Providing subject-matter training and material is basically the role of the state specialist.

2. County extension workers are program generalists. The program specialist is needed to back them up with specific subject-matter materials and with training programs.

3. I think the role of the specialist is to back up county extension efforts with popular bulletins, letters, films and training.

4. Interpreting research results to county extension agents through bulletins, fact sheets and training session; that's the real job of the specialist.

5. Transmitting subject-matter information to counterparts in the field is essentially the specialist's role.

6. The specialist is a trainer of teachers. They should devote major emphasis to developing field workers' understanding of subject-matter and of ways of using it.

7. Specialists must help train agents in subject-matter information. Modern technology is moving at a rapid pace. Research and information media keep specialists on their toes and up to date. These new findings must be interpreted and taught to agents so they can be "ahead of the hounds" so to speak, in teaching others.

8. Technology or technical subject-matter is the core of the extension program. All successful extension specialists impart their subject-matter knowledge to county agents so that those agents can use this information in developing educational programs.

9. We need, most of all, the subject-matter information of specialists to handle problems that arise in the field.

10. Agents could promote, teach and evaluate programs if the specialist just kept them up-to-date with material and information.

PROGRAM PROMOTION (PP)

1. A member of a county staff would be more likely to use the program of a specialist if that specialist included plans in the program for promoting the program and getting people to attend and take part.

2. County staff members are not salesmen and really do need help from specialists in promoting programs.

3. In this day and age of hustle and bustle, even beneficial and needed educational opportunities must be sold. So, the selling of the program must begin with help from the subject-matter specialist.

4. Specialists must take the initiative and prepare everything the county staff needs in the specialist's program area to promote and attract public attention and, subsequently, get people to attend the educational event.

5. County staff members would be able to utilize their time to better advantage if they had help from specialists in the preparation of program promotion and sales material.

6. Specialists must help county staff members sell extension programs so that more people will be helped with the new ideas and information therein.

7. County extension agents are responsible for results. And one type of result is audience participation in programs. It may be inferred from this that the specialist shares responsibility for getting audience participation when the agent uses the specialist's program. So, to that extent, the specialist shares the responsibility of helping the county worker sell or promote the program.

8. The promotion of a particular specialist's program by county agents calls for the specialist's knowledge, abilities and resources. The specialist should consider these county needs in the area of helping agents sell programs, and provide necessary help and materials.

9. For years, specialists have told the field staff how important their program is, but they have failed to tell them how to promote it and to provide tools for promotion with the public. It seems important that they do so.

10. Specialists, too, are in the educational sales field; selling their programs to agents and then helping agents sell the programs to the lay public.

PROGRAM TEACHING (PT)

1. If the specialist takes the time and effort to provide good lesson plans and visual meterial for the county worker to use, that county worker will have a better program for the clients.

2. Campus based graphic arts specialists can make program visual aid material for the specialist to disseminate to county staff members. This material would certainly be of assistance to all counties in program presentation; a much needed form of assistance.

3. Scarcity of time on the part of county extension agents dictates the need for specialists to design and construct suitable lesson outlines along with visual material for those county extension agents' use.

4. The specialist knows the particular subject-matter area very well. Therefore, that specialist can develop more meaningful and usable teaching plans, outlines and teaching aids than the county worker who has many other program thrusts to consider.

5. A county staff member can work with more lay people in more programs if each specialist would provide complete meeting guidelines, lesson plans and teaching material in his particular program.

6. The specialist can help the agents in the field improve their teaching efforts by providing plans and teaching aids--perhaps even slide/tape presentations in a complete program emphasis.

7. The specialist is a teacher of teachers; and one part of that job is to develop a program kit, complete with usable visual aids, lesson plans, meeting suggestions and tips for teaching in each subject-matter program.

8. Specialists are not "spoon feeding" agents when they prepare and distribute lesson plans, program guidelines and visual material for use with their programs.

9. By being knowledgable about the objectives of various extension sub-systems, such as county extension units, individual specialists can visualize their own role and complementary linkages, and hence make a better contribution. For example, providing teaching and lesson plans along with visual material for better presentation at the county level.

10. The roles played by people in various extension staff positions must mesh together in pursuit of the macro objectives of the system. For optimum results, the specialists-to-agent linkage will have to include all that the agent needs to present the specialist's program, including such items as audio visual aids, teaching plans and program session guidelines; in some cases slide or videotape presentations.

PROGRAM EVALUATION (PE)

1. If a specialist provided an evaluation guideline for the agent to use in determining the effectiveness of the educational program as the agent used it, better teaching would probably result.

2. Extension is weak in program effectiveness evaluation. Specialists could help remedy this situation by assisting the field staff in evaluating the effectiveness of the specialist's particular programs.

3. The specialist's job includes providing measures by which county agents can determine effectiveness of the specialist's program when used in the field.

4. Not all of the field staff knows how to evaluate educational programs. Specialists would be of great help if they provided guides to evaluation with their programs.

5. We need workable and uniform measures of program effectiveness. Specialists could help solve their need by providing guidelines to evaluation of their own particular programs.

6. The specialist is a teacher of teachers. The specialist's program kit, which includes evaluation guidelines for agent use, is one good way of teaching agents how to evaluate educational programs.

7. The specialist would know a lot more about how well his own educational program is answering needs if that specialist would provide evaluation guidelines with the program for the local agent to use.

8. Unless the specialist provides some way to measure his program's effectiveness in the field, that specialist can have little idea as to how effective his program really is.

9. The continuous evaluation of a specialist's program in relation to results attained or being attained is of highest priority to the extension enterprise. Specialists must be helping agents with this evaluation.

10. Specialists must help agents in making judgments as to whether the specialist's program produces outputs that contribute to the fulfillment of needs.

APPENDIX B

INSTRUCTIONS FOR Q-SORTING

70 STATEMENTS

Q-Sort Instructions

1. In the white deck of cards are 50 statements relative to the role of the OSU Extension subject-matter specialist. Each card has one statement.

2. Please read all of the statements carefully and then lay them aside.

3. Take the deck of blue cards, remove the paper clip, and lay aside the top card (the one with the checkmark). Spread the rest of the cards before you as follows:

2 cards	3 cards	5 cards	9 cards	12 cards	9 cards	5 cards	3 cards	2 cards
1 Least Agree	2	3	4	5	6	7	8	9 Most Agree

4. Pick up the 50 white statement cards again, and, as you go through them, place them in piles on the blue cards. When you finish the white cards will form a continuum of "least agree" to "most agree" with each pile of white cards containing the number of cards as designated on the bottom blue card.

5. When you have sorted all cards and have finished, pick up the piles <u>from right to left</u> in the following manner: pick up pile number 9, including the blue bottom card, and place pile number 9 on pile number 8. Then place pile number 8 on pile number 7, and continue on down the line. When all are completed into one pile, put the rubber band around it. This will complete the project.

APPENDIX C

JOB DESCRIPTIONS OF OSU EXTENSION SPECIALISTS

JOB DESCRIPTION

I. Title

Extension Subject-Matter Specialist, College of Agriculture

II. Working Authority

Oklahoma State University, the Cooperative Extension Service, and the United States Department of Agriculture

III. Nature and Purpose

To provide subject-matter leadership and direction for Extension educational programs in his subject-matter field consistent with the programs and policies of Oklahoma State University and the United States Department of Agriculture

IV. Major Responsibilities

A. Provide effective Extension program leadership by:

(1) cooperating with the Extension Program Coordinator in the formulation, development, execution and evaluation of an effective overall Extension program;

(2) planning, developing, coordinating with the Department Head and others responsible, then initiating, executing and following through with an effective educational program in his assigned subject-matter field;

(3) participating in the development of inter-disciplinary and inter-departmental educational programs which are designed to meet the educational needs of specific clientele;

(4) involving members of the teaching and research staff in his subject-matter field in plans for upgrading current educational programs, searching for and using new program ideas, which are progressively more effective than those currently being used;

(5) receiving and transmitting information in his subject-matter field;

(6) suggesting, in his subject-matter field, in-service training programs and graduate study for field and state personnel;

(7) being knowledgeable of the programs and capabilities of other departments, industry, federal, state and other agencies and organizations involved in the subject-matter field and to cooperate with these groups on educational programs which are beneficial to the public;

(8) keeping well informed on all subject-matter in his assigned field and maintaining a practical understanding of problems and changes through contacts and visits with those who are making application of subject-matter information;

(9) accepting and executing emergency or other special Extension assignments made by the Department Head, the Director for Extension Work, College of Agriculture, or by others when requested by the Department Head.

V. Administrative Accountability

To the Department Head in whose department he is administratively assigned

VI. Relationships

The Extension specialist will maintain harmonious and productive relationships with all Extension personnel, other University personnel, and with many individuals and groups relating to agriculture and other special interest groups

VII. Qualifications

A. Demonstrated ability to exercise sound judgment, initiative, and leadership in developing educational programs designed to meet the agricultural needs and problems of the people in Oklahoma

B. Possess physical and moral leadership, intellectual traits, and dedication necessary to permit creditable fulfillment of responsiblities as a respresentative of University Extension and the College of Agriculture, Oklahoma State University

C. Experience in Extension or a closely related field is highly desirable

D. A genuine desire and willingness to keep current and abreast in his subject-matter field

E. Preferably a doctoral degree in his subject-matter field

VIII. Professional Improvement

Follow through with a continuous professional improvement program in his field of subject-matter specialization, as well as areas of program leadership, communications and other relevant areas.

APPENDIX D

SCORES OF Q-SORT

Q-SORT OF EXTENSION SPECIALISTS' ROLE ASPECTS

Statement No.	Role Aspect	Specialist #1	Specialist #2	Specialist #3	Specialist #4	Specialist #5	Specialist #6	Specialist #7	Agent #1	Agent #2	Agent #3	Agent #4	Agent #5	Agent #6	Agent #7
1	ND	5	5	4	5	4	4	3	5	1	1	5	3	4	2
2	ND	3	5	7	2	5	5	5	4	2	4	4	3	4	4
3	ND	4	4	5	5	6	4	6	5	5	4	5	4	4	3
4	ND	7	4	6	5	6	4	5	5	3	4	6	3	5	3
5	ND	5	4	7	5	6	4	1	6	3	4	3	5	2	1
6	ND	5	8	7	7	7	7	5	5	4	3	4	5	5	3
7	ND	7	4	6	6	5	6	3	9	5	2	6	6	7	8
8	ND	4	5	5	6	3	4	3	1	4	1	2	1	1	3
9	ND	8	4	6	5	5	4	5	4	6	2	4	2	3	4
10	ND	4	6	5	5	6	6	5	3	1	3	3	1	1	2
11	RA	8	6	8	8	6	8	7	7	7	7	7	5	6	6
12	RA	3	8	3	8	8	9	8	9	8	7	7	7	9	7
13	RA	3	7	8	7	6	7	7	5	7	7	8	6	6	7
14	RA	9	8	8	8	8	8	7	8	8	6	8	7	7	7
15	RA	7	9	8	7	7	8	8	8	8	8	9	9	8	7
16	RA	8	9	7	7	7	9	9	7	8	9	9	9	9	7
17	RA	7	7	8	7	8	6	9	7	7	8	7	7	7	6
18	RA	6	7	7	7	6	6	8	6	7	6	6	5	7	8
19	RA	7	7	6	6	6	7	6	5	6	5	6	6	6	6
20	RA	9	7	5	6	6	3	7	5	4	6	5	7	6	8

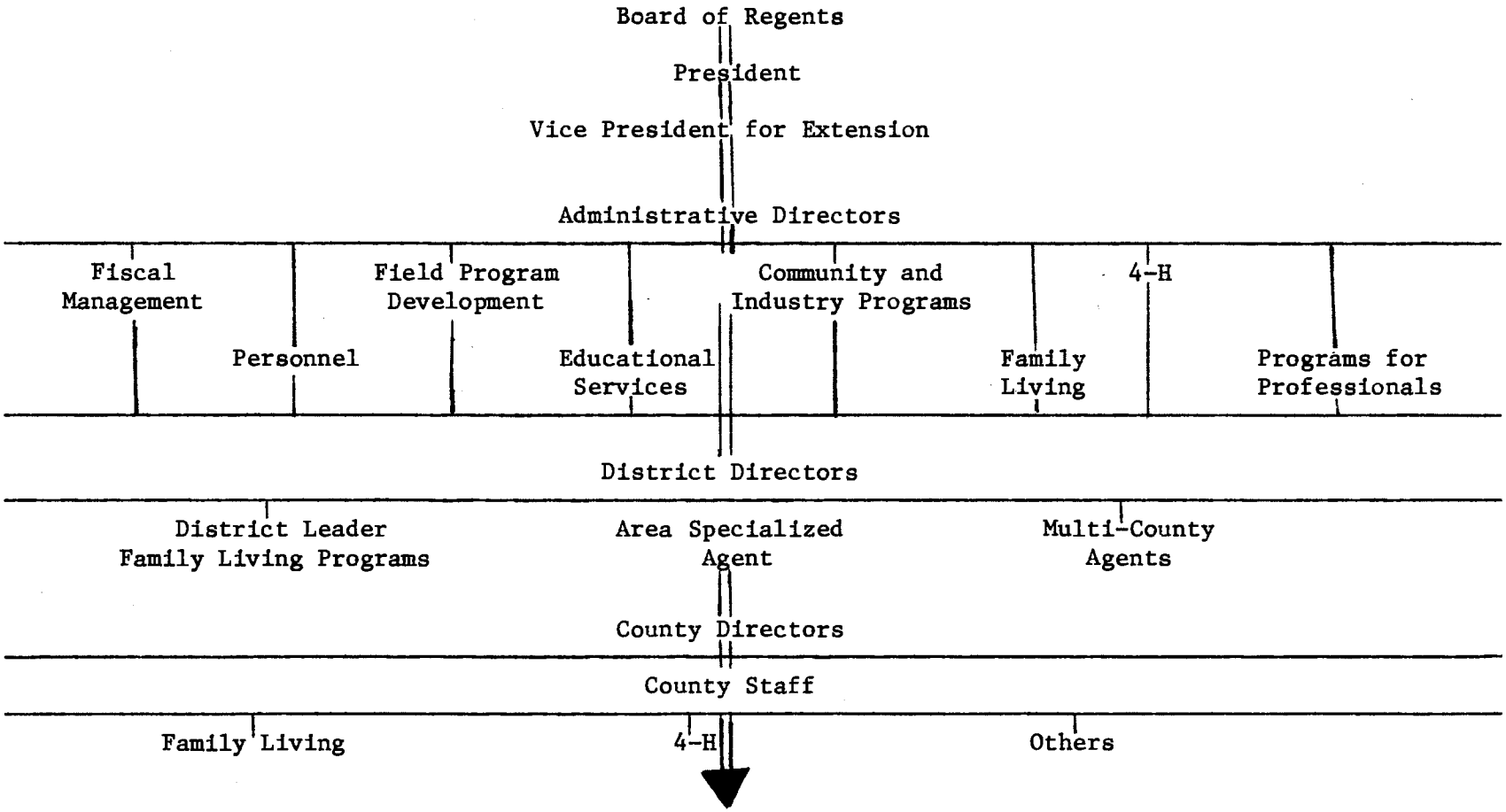
Statement No.	Role Aspect	Specialist #1	Specialist #2	Specialist #3	Specialist #4	Specialist #5	Specialist #6	Specialist #7	Agent #1	Agent #2	Agent #3	Agent #4	Agent #5	Agent #6	Agent #7
21	PP	5	3	5	4	4	4	5	7	5	5	4	6	5	6
22	PP	4	3	4	3	3	7	4	7	7	7	4	6	6	6
23	PP	5	3	1	3	2	6	4	6	5	6	4	6	6	6
24	PP	2	1	2	1	2	7	1	5	6	5	4	5	5	9
25	PP	3	2	3	4	4	6	4	6	5	6	5	6	5	6
26	PP	1	1	1	2	1	6	2	6	5	6	5	5	5	5
27	PP	2	3	3	4	1	5	3	6	5	6	4	5	5	5
28	PP	2	2	3	4	3	5	2	5	4	6	5	5	5	6
29	PP	1	2	5	5	5	6	4	8	9	7	5	6	5	6
30	PP	4	3	4	4	5	6	4	6	6	5	5	5	4	4
31	PT	6	4	4	4	5	5	4	6	6	5	6	5	4	5
32	PT	5	4	4	5	5	3	5	5	6	5	6	6	6	5
33	PT	6	4	2	3	4	5	5	6	6	5	6	7	6	5
34	PT	6	5	4	5	4	5	4	5	5	5	7	8	7	5
35	PT	6	5	5	5	4	5	4	5	5	8	6	8	8	4
36	PT	5	6	5	4	4	5	5	4	6	9	8	8	8	4
37	PT	6	6	5	3	3	5	3	4	6	6	6	5	5	5
38	PT	3	4	2	1	2	5	2	4	5	3	5	3	3	5
39	PT	4	6	5	4	3	5	4	4	5	5	7	4	2	9
40	PT	6	6	5	6	4	5	5	4	5	5	5	4	2	5

Statement No.	Role Aspect	Specialist #1	Specialist #2	Specialist #3	Specialist #4	Specialist #5	Specialist #6	Specialist #7	Agent #1	Agent #2	Agent #3	Agent #4	Agent #5	Agent #6	Agent #7
41	PE	5	6	6	6	4	4	6	3	2	3	2	2	3	2
42	PE	5	6	6	6	5	4	6	4	4	2	3	3	3	4
43	PE	4	5	6	6	5	3	6	4	3	3	3	2	3	4
44	PE	5	6	6	6	6	3	7	3	4	4	1	4	4	5
45	PE	4	5	6	5	6	1	6	3	2	4	1	4	5	5
46	PE	4	5	5	5	6	3	6	3	3	4	2	4	4	4
47	PE	5	5	4	7	6	2	6	2	3	5	5	4	6	5
48	PE	5	5	4	3	5	2	6	1	4	5	3	4	5	4
49	PE	6	5	4	2	5	2	5	2	4	4	4	4	4	3
50	PE	6	5	4	4	5	1	5	2	4	4	5	5	4	1

APPENDIX E

OKLAHOMA STATE UNIVERSITY EXTENSION

ADMINISTRATIVE STRUCTURE



OKLAHOMA STATE UNIVERSITY EXTENSION ADMINISTRATIVE STRUCTURE

VITA

Robert Fred Reisbeck

Candidate for the Degree of

Doctor of Education

Thesis: COMPARISON OF OKLAHOMA STATE UNIVERSITY EXTENSION SPECIALISTS' ROLES AS PERCEIVED BY SPECIALISTS AND FIELD STAFF MEMBERS

Major Field: Higher Education

Biographical:

Personal Data: Born at Berthoud, Colorado, June 7, 1932, the son of Mr. and Mrs. Phillip Reisbeck.

Education: Graduated from Berthoud, Colorado, High School in 1950; received the Bachelor of Science in Agriculture degree from Colorado State University in 1954; received the Master of Science degree at Oklahoma State University in 1973; completed requirements for the Doctor of Education degree at Oklahoma State University in 1974; member Alpha Zeta, honorary scholastic agriculture society and Kappa Tau Alpha, honorary scholastic journalism society.

Professional Experience: District salesman, Ralston Purina Co.; District Manager, Nutrena Mills; Extension Agent, 4-H Program and Extension Communication Training Specialist, Oklahoma State University Extension; member Sigma Delta Chi, national professional journalism society.