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A COMPARATIVE ANALYSIS OF THE EXPRESSED  
TRAINING NEEDS OF KANSAS COUNTY AGENTS  
IN THE AREA OF THE EDUCATIONAL PROCESS

by

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## AUTOBIOGRAPHY

The writer was born on February 2, 1934 in the City of Iligan. He was raised in a small Philippine town. He has five brothers and five sisters.

In 1940 the writer was barely seven years old when he enrolled in the first grade of the Iligan Public Primary School. He was in the second grade when the second World War broke out. He resumed his grade school and high school education after the war in the public schools of Iligan. He attended his senior year in Farmers' Institute in Bonifacio, Misamis Occidental. He graduated from high school in 1953 in a class of nineteen students as class salutatorian.

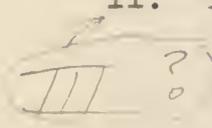
In 1953 the writer enrolled in a two-year preparatory agricultural curriculum in the School of Arts and Sciences of Silliman University. He finished his Bachelor of Science in Agriculture degree in the College of Agriculture, University of the Philippines in 1958.

After graduation from college he was employed as a Rural Life Promotional Worker of the Rural Life Program of the United Church of Christ in the Philippines. In the Rural Life promotional work he worked not only with adults but also with young people.

In 1962 he accepted the sponsorship from the United

Church Board for World Ministries which was initiated by the Kansas Western Men's Association out of their desire to help support a student from another country to do graduate study in Agricultural Extension at Kansas State University.

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## CHAPTER I

### INTRODUCTION

#### Purpose

The major purpose of this study was to determine and compare the expressed training needs of Kansas County Agents in the twelve specific areas of the Educational Process as identified by McCormick<sup>1</sup> with the assistance of the members of the National Task Force on Cooperative Extension Inservice Training.<sup>2</sup>

#### Background

Competency in the Educational Process is one of the Major demands of the Extension profession. This is supported by various studies and authorities in the Extension Service. As shown by the studies of Price,<sup>3</sup> McCormick,<sup>4</sup> and Abdul-Hadi,<sup>5</sup> most of the County Agents studied indicated

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<sup>1</sup>Robert W. McCormick, "An Analysis of Training Needs of County Extension Agents in Ohio" (unpublished Ph. D. dissertation, University of Wisconsin, 1959), p. 217.

<sup>2</sup>Ibid., pp. 12-13.

<sup>3</sup>Randel K. Price, "An Analysis of Educational Needs of Arkansas Extension Agents" (unpublished Ph. D. thesis, University of Wisconsin, 1960), p. 154.

<sup>4</sup>McCormick, op. cit., pp. 85, 89-103.

<sup>5</sup>Nazeeh Abdul-Hadi, "An Analysis of the Expressed Training Needs of County Agricultural Extension Agents in Kansas" (unpublished Master's thesis, Kansas State University, Manhattan, Kansas, 1963), p. 53.

that their role was educational. However in the same studies, County Agents also indicated less need for training in the Educational Process as compared to the other competency areas listed by the National Task Force.<sup>6</sup> It does not seem reasonable that these County Agents were sufficiently trained in the Educational Process because during their undergraduate work most of them had had no training in the Educational Process. Price reported only 20 per cent of his respondents had had undergraduate training in education, McCormick reported 55.6 per cent, and Abdul-Hadi reported 18 per cent. In these three studies the rank of the Educational Process among the nine competency areas according to training needed by the County Agents was 7th. According to importance of the Educational Process to the County Agents in order to be effective in their work, the rank order as reported by the same authors was 6.5th, 5th, and 6th respectively. The inservice training programs no doubt have been filling this undergraduate training gap. But why do County Agents give less importance to the Educational Process when in fact they know that their role is primarily educational? McCormick stated: "a phenomenon which is not unusual to observe is that a person feels the

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<sup>6</sup>The National Task Force on Cooperative Extension Inservice Training, An Inservice Training Program for Cooperative Extension Personnel, pp. 13-15.

areas in which he is most highly trained and most competent are the most important."<sup>7</sup> This statement seems to indicate that there should be more emphasis in training County Agents in the Educational Process. Training in the Educational Process is very necessary especially when the County Agents have had no training in the Educational Process during their undergraduate work in college.

The major function of the teacher in the teaching-learning process is the guidance of learning through teaching. Teaching is not just the handing-out of information, very insignificant learning takes place by this method. Effective learning, that can bring about change in attitude, knowledge, and skill, is active learning. Active learning is brought about by active teaching. Handing-out information is not active teaching because it does not use most of the learner's senses of perception. It does not involve most of his senses and emotions. By the employment of teaching methods, techniques, and tools suited to the learning situation active learning takes place. Active teaching will motivate the learner to act on what he is learning and active learning is involving the whole person--not just one of his senses. One of the objectives of teaching is to raise the level of remembered and useful knowledge. This

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<sup>7</sup>McCormick, op. cit., p. 91.

can be attained by the involvement of as many senses of perception of the learner as possible through the use of different teaching methods as illustrated by Kelsey and Hearne.<sup>8</sup> People are influenced to change in proportion to their exposure to the numbers of different techniques and methods of Extension teaching. Anderson<sup>9</sup> put it in another way by saying that "an agent or specialist must know his subject matter, but reactions to his methods may control how much people learn." Anderson pointed out not only the importance of numbers but also of the appropriateness of the methods and techniques. Through the use of appropriate methods and techniques subject matter can be made more meaningful and easier to remember.<sup>10</sup> One of the reasons why people do not change so easily is because they cannot act upon information that they no longer remember. An effective teaching method can help increase the ability of the learner to remember the acquired information long enough to give him a chance to adopt the practice or idea.

To help the Kansas Extension Service Supervisors and

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<sup>8</sup>Lincoln D. Kelsey and Canon C. Hearne, Cooperative Extension Work, third edition (Ithaca, New York: Comstock Publishing Association, 1955), p. 270.

<sup>9</sup>Ernest W. Anderson, "An Approach to Effective Teaching," Journal of Cooperative Extension, Vol. 1, No. 1 (Spring, 1963), p. 9.

<sup>10</sup>Ibid., p. 13.

the Kansas Training Committee determine the training needs of the Kansas County Agents one of the methods used has been the "expressed training need method," where County Agents express their training needs through a questionnaire (see Appendix).

Quoting from the minutes of the meeting of the National Task Force on Cooperative Extension Inservice Training in Manhattan, Kansas in April, 1958, McCormick wrote:

After some discussion as to whether or not one can adequately analyze his own training needs, it was agreed that the agent's own analysis of his training needs is a good starting point. It was agreed also that good subject matter training as well as method is essential.<sup>11</sup>

It is important that in a training program those who are to be trained should have a part in the development of the training curriculum. This can contribute to the effectiveness of the training program.

In this study the writer was searching for answers to the following questions: What do most Kansas County Agents express as their training needs in the specific areas of the Educational Process? How are the Kansas County Agents as groups related in their expressed training needs in the specific areas of the Educational Process? How do the Kansas County Agents as a whole agree in their expressed

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<sup>11</sup>McCormick, op. cit., p. 7.

training needs in the specific areas of the Educational Process?

### Objectives

The purpose of this study was to determine and compare the training needs of the Kansas County Agents in the twelve specific areas of the Educational Process as expressed by the Agents.

The following specific objectives were developed to give direction and to limit the scope of the study:

1. To determine the training needs of the Kansas County Agents according to their expressed training needs in the specific areas of the Educational Process.
2. To identify some of the personal and situational factors which are associated with the expressed training needs of the Kansas County Agents in the specific areas of the Educational Process.
3. To determine the degree to which the three Kansas County Agent position groups agree in their expressed training needs in the specific areas of the Educational Process.

### Hypotheses

The hypotheses in this study were developed from the objectives and the review of literature. They served as

guides in analyzing the data.

The data in this study were taken from a total population, and have been used as the basis for accepting or rejecting the null hypotheses. The following hypotheses were developed:

1. There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and position group.
2. There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and undergraduate major.
3. There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and degree held.
4. There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and role perception.

Development of the Questionnaire

The questionnaire used in this study was developed by Abdul-Hadi.<sup>12</sup> Abdul-Hadi based his questionnaire on one developed by McCormick.<sup>13</sup> Some revisions were made by Abdul-Hadi in the questionnaire developed by McCormick to fit the questionnaire to the Kansas County Agents' situation. Revisions were made only in the first part of the questionnaire which was concerned with the background information of the Kansas County Agents. The questionnaire contained a total of 127 statements. The basic areas comprising the questionnaire were the nine areas of competency identified by the National Task Force on Cooperative Extension Inservice Training.<sup>14</sup>

McCormick suggested that a more detailed subdivision of the nine areas of competency would be necessary if the resulting data were to be meaningful to supervisors and administrators in developing training programs for County Agents.<sup>15</sup>

Each of the nine areas was divided into four parts as follows:

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<sup>12</sup>Abdul-Hadi, op. cit., pp. 139-156.

<sup>13</sup>McCormick, op. cit., pp. 209-226.

<sup>14</sup>The National Task Force, loc. cit.

<sup>15</sup>Ibid.

1. Part one, concerned the importance of the nine areas to the effectiveness of the County Agents in Kansas. The degree of importance was indicated as "absolutely essential", "highly essential", "would be helpful", or "not important". A four point scale was developed. Values were assigned as follows: four for "absolutely essential", three for "highly desirable", two for "would be helpful", and one for "not important".
2. Part two, concerned the amount of training the Kansas County Agents felt they needed in the nine areas of competency. County Agents could indicate their training needs as "feel I understand", "need some training", "need much training", and "need very much training". A four point scale was developed and values were assigned as follows: four for "need very much training", three for "need much training", two for "need some training", and one for "feel I understand". "Feel I understand" is the category where County Agents indicated no training needed. Another category was added, the "not applicable to my job", which had a zero value.
3. Part three, concerned the areas which Kansas County agents felt they would like to include in

their graduate training program, when taking leave of absence.

4. Part four, concerned the areas which Kansas County Agents felt they would like to include in their inservice training program.

The questionnaire was pretested by fellow graduate students at Kansas State University as a means of checking its preciseness and to gather suggestions to improve the questionnaire if necessary.

#### Collecting the Data

The data used in this study were collected by Abdul-Hadi. This study was designed to make a comparison of the expressed training needs of Kansas County Agents in the twelve specific areas of the Educational Process. Therefore only the data in the questionnaire in part two concerning the Educational Process, and the background information on Kansas County Agents were used.

The data of Abdul-Hadi's study were collected through mailed questionnaires. He mailed the questionnaires to Kansas County Agents in June, 1962. Detailed instructions were given for filling out the questionnaire. The questionnaire was divided into two parts, the first part was devoted to necessary background information about the respondents and the second part was devoted to information relative to

each of the nine areas of competency identified by the National Task Force on Cooperative Extension Inservice Training.

Respondents in the Study

All Kansas County Agents who were on the job in July, 1962 were included in this study. There were 228 potential respondents, however those who had less than one year tenure in the Extension Service were disqualified.

Table I shows that 92.4 per cent of the Agricultural Agents, 83.3 per cent of the Home Economics Agents, and 69.7 per cent of the 4-H Club Agents were included in the study. The over-all percentage of those who were included in the study was 85.5 per cent of the potential.

TABLE I

POTENTIAL AND ACTUAL KANSAS COUNTY AGENT  
RESPONDENTS BY POSITION

Position	Respondents				
	Potential	No reply	Less 1 year	Actual	Actual in per cent
Agriculture Agents	105	7	1	97	92.4
Home Econ. Agents	90	9	6	75	83.3
4-H Club Agents	33	8	2	23	69.7
Total	228	24	9	195	85.5

### Analysis of the Data

The information gathered by Abdul-Hadi regarding the expressed training needs of Kansas County Agents was pre-coded and the data were punched on IBM cards. The IBM machine in the Kansas State University Statistics Department was used in the processing of the data.

Descriptive statistical techniques were used to analyze the data in this study. The total universe of Kansas County Agents was used in this study because it was small enough to be handled efficiently. Sampling error was eliminated because the total universe was used. The data were analyzed by means of percentage distribution, rank order, coefficient of rank correlation, and coefficient of concordance. The descriptive terms used in the questionnaire regarding the amount of training needed were assigned values as follows: "feel I understand" was given one, "need some training" was given two, "need much training" was given three, "need very much training" was given four, and "not applicable to my job" was given zero. Respondents who did not answer an item in the questionnaire were not included for that particular item. An equal distance was assumed between each descriptive term and values were assigned as outlined above so that the items compared could be put in rank order for comparative purposes in the analysis of the data.

### Significance of the Study

The findings in this study should provide useful information about the expressed training needs of Kansas County Agents in the specific areas of the Educational Process. They should be useful to administrators and supervisors of the Kansas Extension Service particularly to the Kansas Training Committee in the formulation of the inservice training program. Other states which have similar problems and similar Extension Service organization as Kansas should find the information in this study useful.

This study should serve as a valuable reference for other studies concerned with the training of County Agents and as a basis for advising prospective County Agents, graduate students in Extension, and Extension inservice trainees.

### Definition of Terms

Below are the operational definitions of certain terms used in this study to clarify ideas and simplify statements.

Kansas County Agents: A term used to designate the Extension workers who are responsible for the Extension program in the counties. They are the County Agricultural Agents, County Home Economics Agents, and County 4-H Club Agents in Kansas.

County Agents: A term used to refer to the County Agricultural Agents, County Home Economics Agents, and County 4-H Club Agents in Kansas.

Respondents: All Kansas County Agents who were included in this study.

Areas of Competency: The nine general areas of competency identified by the National Task Force on Cooperative Extension Inservice Training.

Specific areas of the Educational Process: The twelve specific areas of the Educational Process identified by McCormick in his study on the training needs of Ohio County Agents.

Undergraduate major: The major field of study of the respondent when he was doing his college undergraduate work.

Hours of graduate work: The number of credit hours completed by the respondent in the Graduate School towards a Master's degree.

Tenure: The number of years the respondent had been employed in the Kansas Extension Service.

Role perception: The perceived role of the respondent, either as educational or non-educational.

Inservice training: The training taken by County Agents on the job after the first year of employment.

Personal factors: The potential influencing factors

inherent in the nature of the respondent.

Situational factors: The potential influencing factors extrinsic in the inherent nature of the respondent.

Chapter II deals with the review of literature.

Chapter III deals with the analysis and interpretation of data regarding the expressed training needs of the Kansas County Agents in the twelve specific areas of the Educational Process.

A summary, conclusions and recommendations are presented in Chapter IV.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

The sources of information reviewed by the writer were studies, books, and other literatures in the field of Personnel Training and the Educational Process. Materials were gathered pertinent to the present study that could help establish a sound research situation. Most of the information regarding training needs was gathered from available materials in the field of Industry, Business and Extension. Information regarding the Educational Process was gathered from available materials in Extension and Education.

It is the purpose of this chapter to review all available materials related to the determination of training needs in the field of Extension, Education, Business and Industry. It is not the intent of this chapter to summarize researches, books, and other literatures related to training needs.

#### The Educational Process

Writers in the field of education use different terms in defining the Educational Process. Nathaniel Cantor<sup>1</sup> used

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<sup>1</sup>Nathaniel Cantor, The Teaching-Learning Process (New York: Dryden Press, 1953).

teaching-learning process, and James R. Kidd<sup>2</sup> used teaching learning transaction. The National Task Force on Cooperative Extension Inservice Training<sup>3</sup> used the term Educational Process. They carry the same meaning. Both teaching and learning belong to the same process, they are opposite sides of the same coin.

The components of the Educational Process are the teacher, the learner, the subject matter, and the environment. All these four components are important. Kidd illustrated the importance of each by the following statement:

There is no hierarchy of values in learning; every factor can be of critical importance--on occasion fresh air may be as important as fresh ideas. Environment, the place, shape, and character of the facilities--all affect the amount and quality of learning.<sup>4</sup>

The Educational Process is an interaction between the teacher and the learner, and is influenced by environment. It is a complex process. It involves the attitude of the teacher, the readiness of the learner, the appropriateness of the subject matter, and the physical and psychological environment.

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<sup>2</sup>James R. Kidd, How Adults Learn (New York: Association Press, 1959), pp. 270-296.

<sup>3</sup>The National Task Force, op. cit., p. 14.

<sup>4</sup>Kidd, op. cit., p. 266.

The function of the teacher in the Educational Process is to encourage learning. According to Kidd "the task of those guiding learning is to bring engagement."<sup>5</sup> To bring about engagement the teacher uses all skills and information he knows. He employs a variety of methods, tools, techniques and principles of teaching and learning in order to develop the most favorable learning situation. "The objective is to provide the climate and atmosphere and freedom and self-discipline in which learning is promoted. It is not so much doing something to the body-mind-emotions but setting up the conditions whereby the person will behave in a learning way."<sup>6</sup> The importance of teaching in the Educational Process is not in the handing-over of information to the learner but in how the information was handed-over. Kidd emphasized this point by stating that "the critical part of the process of teaching-learning is how the learner is aided to embark on this active, growing, changing, painful, or exhilarating experience we call learning."<sup>7</sup>

The attitude of the teacher has a tremendous significance in his role in the Educational Process. It is

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<sup>5</sup>Ibid., p. 282.

<sup>6</sup>Ibid., p. 16.

<sup>7</sup>Ibid., pp. 15-16.

important that a teacher review his philosophy of life and see if it is in accordance with the philosophy of education and of democracy. A teacher's philosophy of life greatly influences his attitude towards people and his profession. According to Cantor, "what a teacher basically believes often 'communicates' itself in ways too subtle for language to capture."<sup>8</sup> Such attitude if it is not based upon the philosophy of education and of democracy will inhibit in many ways the effectiveness of a teacher.

When a person is engaged in the learning process his whole complex personality is involved. He is the only one who can employ his own resources to learn as he goes through the process. Learning is personal, one has to learn for himself. The teacher can only develop a favorable learning situation and provide the subject matter.

As part of the learning situation, it is true that the learner has to be aided to see his need and motivated to act on it, but real learning has to take place within the person. In the Educational Process the function of the learner is to learn. And it must be well recognized that the learner has a part in the selection of the subject matter and in the development of a favorable environment for learning, which often is mistaken as only a teacher's part.

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<sup>8</sup>Cantor, op. cit., pp. 10-11.

This is where the importance of program planning comes into play.

Out in the county, it is the people's needs that have to be met and they have to take part in it. In program planning they come to know their problems, their limitations, and their resources as a community and begin to know and accept each other. The attitude of the people can influence the educational effort in the county considerably. Some type of relationship has to occur that can enhance the educational program. Engagement is the word Kidd used to illustrate this relationship. To Kidd, engagement is a very important factor in the Educational Process. He considers it as "the key to learning." It is "a relationship between the learner, the task or subject matter, the environment, and the teacher."<sup>9</sup>

The fact cannot be ignored that knowledge of the Educational Process is becoming more and more important for County Extension Agents particularly since their classroom is the entire county, their clientel is heterogeneous and their subject matter is as varied as the needs of the people. The importance of competency in the Educational Process is even more acute with the expanding role of the Extension Service and the rapid development in science and

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<sup>9</sup>Kidd, op. cit., p. 267.

technology. "It is fortunate that an astonishing variety of forms, methods, techniques, and devices are available to the agent in adult learning."<sup>10</sup>

Learning as indicated by adoption of practices by people in the county can be increased greatly by the employment of what is already known about the Educational Process. Kelsey and Hearne<sup>11</sup> found in studies conducted over a long period of years in many counties that people are influenced by extension education to adopt new practices in proportion to the number of different teaching methods with which they come in contact. There are volumes of information on the Educational Process which could be beneficial to teachers. Frustration of extension agents for being less effective in bringing about change can be avoided by understanding the Educational Process and by the application of its principles and techniques. The following statement by Kidd is a good reminder to educators of our day:

Nothing is more deeply belittling than the self-image that some teachers have of themselves as being but the repositories of facts or ideas, ready to display them before others, but themselves taking little part except as transmitters.<sup>12</sup>

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<sup>10</sup>Ibid., p. 266.

<sup>11</sup>Kelsey and Hearne, op. cit., p. 270.

<sup>12</sup>Kidd, op. cit., p. 272.

### The Concept of Training

The primary objective of training in any organization is efficiency in management, operation, and production. As illustrated by Industry, efficiency is increased markedly and the organization functions soundly as a result of training but it illustrated also that training is not a panacea. Studies conducted in Industry, Extension, and Education all point to the desirability of training. A statement from the National Foremen's Institute expressed very adequately how Industry is dependent upon training:

If industrial operations are to be done in the best, the easiest and the quickest way, at the least cost, then training is an integral part of effective operations. It is a continuous process.<sup>13</sup>

Before the second World War the general attitude regarding personnel training was cold even if fundamental changes in Business and Industry had already taken place, especially since 1910. The Armed Forces during the second World War have shown the great potential in training. Management, especially in Industry came to realize the importance of training as an integral part of the organization only after the amazing experience of the Armed Forces.

Education was awakening to the importance of personnel training about 1919 as indicated by an address given by

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<sup>13</sup>National Foremen's Institute, Inc., "Training Workers on the Job," Foremen's Management Conference, Number 10, p. 406.

J. T. Wheeler in the Ninth Annual Meeting of the American Association for the Advancement of Agriculture Teaching on January 7, 1919. He stated that "it is not clear in the minds of some that teachers who have had experience and training need to continue their professional study." He stated further that "teachers of any subject must keep step in the march of educational progress in order to be of greatest service in any system of schools or to any educational institution."<sup>14</sup>

Training is a necessity. Each year approximately 90 per cent of the firms report that one of their major responsibilities is training.<sup>15</sup> The 10 per cent are mostly smaller firms which hire employees who have been trained elsewhere. But this 10 per cent does not indicate that training is not needed. Progress in science and technology, job mobility of people and complexity of human relation make training indispensable in any organization. Industry, Extension and Education recognize these three factors as challenges to their training program.

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<sup>14</sup>The Ninth Annual Meeting of the American Association for the Advancement of Agriculture Teaching, "Improvement of Teachers in Service," Training Teachers of Agriculture, p. 12.

<sup>15</sup>Dale Yoder, Personnel Management and Industrial Relations, fourth edition, (New York: Prentice-Hall, Inc., 1956), p. 279.

Difference in the concept and scope of training programs in Business and Industry was pointed out by Planty, et al.,<sup>16</sup> but their aims in training are basically the same as stated by the same authors as follows:

To build continually and systematically to the maximum degree and in the proper proportion that knowledge and those skills and attitudes which contribute to the welfare of the organization and the employees.<sup>17</sup>

As a definition they suggest that training is:

The continuous, systematic development among all levels of employees of that knowledge and those skills and attitudes which contribute to their welfare and that of the company.<sup>18</sup>

The National Task Force on Cooperative Extension Inservice Training offered the following as a goal of inservice training in particular:

The general goal of inservice training is to (1) fill in gaps in the previous preparation; (2) develop ability to carry out the extension program; and (3) stimulate continued growth of extension personnel.<sup>19</sup>

As a definition of inservice training, the National Task Force on Cooperative Extension Inservice Training stated the following:

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<sup>16</sup>Earl G. Planty, William S. McCord, and Carlos A. Efferon, Training Employees and Managers, (New York: Ronald Press Co., 1948), p. 24.

<sup>17</sup>Ibid., p. 24.

<sup>18</sup>Ibid., p. 24.

<sup>19</sup>The National Task Force, op. cit., p. 7.

Inservice training is that phase of organized learning experience which is provided employees by the agency throughout the employment period. It is training directed towards developing understanding of job operations and standards, agency philosophy, policies and procedures as well as current technical research findings. It includes induction training for new workers and on-the-job training in both subject matter and in educational methods for experienced personnel at all levels of the organization.<sup>20</sup>

There is a great similarity in how Business, Industry, and Extension view training. Three elements are common in their training programs, they are: (1) to increase proficiency, (2) to be up-to-date with new developments, and (3) to develop good human relation.

Training should be current, it should "change with change" as long as an organization expects to be efficient. "It is a continuous process, activating, reinforcing and building the human elements of an organization."<sup>21</sup> Appraisal of training needs should follow a system and must be continuous. Evaluation should be made of training to aid in determining training needs.

#### Identifying Training Needs

The first step in the development of a training program is the establishment of a basis for training. This

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<sup>20</sup>Ibid., p. 1.

<sup>21</sup>David L. Korb, "How to Determine Supervisory Training Needs," Personnel, Vol. 32, No. 4 (January, 1956), p. 335.

requires the identification of training needs. Training programs should be concerned with immediate needs as well as future needs and take into consideration that no one in the organization is exempted from training. A number of methods for identifying training needs have been developed in Industry and Extension Services. The growing number of methods of identifying training needs imply that this operation is not a simple matter. This is probably one reason why some training directors in Industry would settle for a hit-or-miss method.

The United States Civil Service Commission developed the following basic process in identifying training needs:

1. Determine what is required or expected of the job or in the situation.
2. Determine the degree to which these requirements or expectations are being met. If they are not being met, find out the reasons. To the extent that these reasons involve changes in knowledge, skill, attitudes, or behavior of employees (at all levels) you have a need which training can probably help meet. You and the line officials concerned will have to judge whether training is the best way to meet it.<sup>22</sup>

Differences in opinion in the method to use in determining training needs have been observed among training directors in Industry. Different writers recommend

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<sup>22</sup>United States Civil Service Commission, "Assessing and Reporting Training Needs and Progress," Personnel Methods, Series No. 3, 1961, p. 7.

different methods for certain reasons. Bellows, et al., recommended the use of the "Training Evaluation Check List"<sup>23</sup> because it is a diagnostic trouble shooting device and will clearly show what is wrong has been agreed on, making certain that action will be taken. Fryer thinks by "studying the learning behavior of the trainees"<sup>24</sup> a better base on which to construct curricula for most complex jobs can be obtained. It is an analysis of the attitude-knowledge-skill patterns of the job and evaluation can be made of every aspect of training. Flanty, et al., suggested that in determining training needs one should use two methods: the first involves contacts and conferences with those who may know of training needs; the second involves a study of performance records.<sup>25</sup>

The differences in methods recommended or used by these writers indicate that certain situations require certain types of methods. Different methods in identifying training needs is employed also in Extension.

Another approach to identifying training needs is

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<sup>23</sup>Roger M. Bellows, Frances M. Estep, and Charles E. Scholl, Jr., "A Tool for Analyzing Training Needs, the Evaluation Check List," Personnel, Vol. 29, 1953, pp. 412-417.

<sup>24</sup>Douglas H. Fryer, "Training with Special Reference to its Evaluation," Personnel Psychology, Vol. 4, 1951, p. 33.

<sup>25</sup>Flanty, et al., op. cit., p. 72.

through the use of a combination of methods.

DePhillips, et al., suggested the following methods:<sup>26</sup>

1. Job analysis and specification.
2. Performance rating.
3. Analysis of personnel records.
4. Other company records, cost and production records, attendance records, and labor turnover records.

The United States Civil Service Commission suggested the following methods:

1. Interviews.
2. Questionnaires.
3. Tests.
4. Group problem analysis.
5. Job analysis and performance reviews.
6. Records and reports studies.<sup>27</sup>

The National Task Force on Cooperative Extension Inservice Training recommended the following methods in organized steps:

1. Locating areas of training need through

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<sup>26</sup>Frank A. DePhillips, William M. Berliner, and James J. Cribbin, Management of Training Programs (Illinois: Home Wood, Richard D. Irwin, Inc., 1960), pp. 273-286.

<sup>27</sup>The United States Civil Service, op. cit., pp. 12-13.

- a. Analysis of jobs.
  - b. Analysis of program emphasis.
2. Identifying the individual worker in need of training through
    - a. Self-surveys.
    - b. Day-to-day observation by superior and specialist.
    - c. Test.
    - d. Analysis of performance evaluations.
  3. Determining priorities in training needs.<sup>28</sup>

Training cost is a major item in industrial relations staff expenses, averaging about one tenth<sup>29</sup> of the total staff budget. It is expensive to carry on an effective training program. To go into the complexities of identifying training needs pays in terms of an effective training program. Duncan expressed his concern about training waste caused by careless planning by stating that "concentrated efforts on the part of Extension officials toward a critical study of training needs is imperative in light of time, personnel and money expended annually for training purposes in most states."<sup>30</sup>

In this present study training was determined by what the Kansas County Extension Agents perceived their

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<sup>28</sup>The National Task Force, op. cit., p. 9.

<sup>29</sup>Yoder, op. cit., p. 283.

<sup>30</sup>James A. Duncan, Training Cooperative Extension Workers--The Coordinated Approach (Madison, Wisconsin: Cooperative Extension Service, College of Agriculture, University of Wisconsin, 1957), p. 5.

training needs to be. In itself it is not a sufficient basis for a training program. It should be used with other methods. It is not a sufficient basis but it is important. The Fifth National Administrative Workshop held at the University of Wisconsin reported that Extension training should be based on the needs of the worker and one of the methods to determine training needs is to give the agents an opportunity to express their needs for training.<sup>31</sup>

### Types of Training

There is no one best way to teach all subject matter as there is no one best way to teach all groups. What is best for one group is not necessarily best for another group. There are a number of types of training available to Extension workers.

Collings described some inservice education programs which are becoming generally accepted in Extension, they are the following:

1. Summer school courses. These courses are initiated by states and limited to their own personnel. Normally, they are of three weeks duration and serve as refresher courses in subject matter as well as methods. They provide for full-time attendance at college classes designed especially for the needs of Extension workers.

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<sup>31</sup>Report of the Fifth National Administrative Workshop, Cooperative Extension Administration, National Agricultural Extension Center for Advanced Study, University of Wisconsin, Madison, 1956, p. 53.

2. Committees to study specific problems. The purpose of such work is, in part, to provide Extension workers with an opportunity for individual growth while working on common problems.
3. Interchange of work responsibility between agents. A recent study of 4-H club work indicated that a considerable block of the agent's time was spent in exchanging responsibilities with other agents.
4. Clinics. Newswriting, radio speaking, and television work are so new that Extension agents often have had no training in them during college. Clinics, in which agents practice writing, speaking and showing and then see and hear themselves perform, are popular and helpful.
5. Studies. Since its beginning, the Extension Service has used county surveys to determine the extent of adoption of recommended practices of farm people. These and other studies of Extension are outstandingly effective methods of inservice education.
6. Field Trips to experiment stations. Regular and systematic field trips to observe experiments under way at college and federal stations is a part of the inservice education program of all states.
7. District and state conferences. Annual conferences, like field trips are perhaps the oldest methods most generally used by states. District conferences on a more frequent schedule have substituted for the state conference in some instances.
8. Leader-training meetings. The Extension specialist's training of local leaders is an excellent vehicle for agent training as well.
9. Professional associations. County Extension Agents have banded themselves into three professional organizations on the national level. Each association has a professional improvement committee. These standing committees testify to the fact that through their own efforts agents are seeking to

raise the level of their work.<sup>32</sup>

Brunner and Yang have a broader classification of training in Extension in general as follows:

1. Pre-employment (undergraduate and apprentice training).
2. Induction.
3. Inservice
4. Graduate work.<sup>33</sup>

The Kansas Extension Service has four phases in its training program. It offers a completely integrated system of training for its employees and prospective employees.

The following are the four phases of training:

1. Pre-service or undergraduate education.
2. Induction training.
3. Inservice training.
4. Graduate study.<sup>34</sup>

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<sup>32</sup>Mary L. Collings, "In-Service Education of Cooperative Extension Workers," Federal Extension Service (Washington: U. S. Government Printing Office, 1954), pp. 6-7.

<sup>33</sup>Edmund deS. Brunner and E. Hsin Pao Yang, Rural America and the Extension Service (New York: Bureau of Publications, Teachers College, Columbia University, 1949), p. 134.

<sup>34</sup>Kansas Extension Service, County Extension Agent's Guide on Development and Philosophy of the Cooperative Extension Service and Employee Benefits (Manhattan, Kansas: Extension Service Kansas State University, June, 1960), pp. 36-37.

The National Task Force on Cooperative Extension Inservice Training outlined three types of training. Each is designed to meet certain kind of training needs. The types are the following:

1. Tenure
  - a. New Personnel
  - b. Experienced Personnel.<sup>35</sup>
2. Specific Type
  - a. Orientation.
  - b. Professional and Scientific.
  - c. Administration.
  - d. Supervisory and Management.
  - e. Evaluation and Educational Research Methodology.
  - f. Clerical and management.<sup>36</sup>
3. Special Group Type
  - a. Specialists.
  - b. Supervisors.
  - c. Administrators, State and County.
  - d. Secretarial and Clerical Extension Workers.<sup>37</sup>

#### The Primary Role of Extension Service

The history of the Extension Service emphasizes that education was and is its primary role. "The farmers' institutes were pioneer institutions in agricultural extension teaching and did much to prepare the way for our present agricultural colleges and schools and especially

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<sup>35</sup>The National Task Force, op. cit., pp. 19-20.

<sup>36</sup>Ibid., p. 31.

<sup>37</sup>Ibid., pp. 15-16.

for the extension system and the county agent."<sup>38</sup> The earliest of the farmers institute meetings was in 1868 in Manhattan, Kansas.<sup>39</sup> There were much earlier efforts of extension work than the farmers institutes such as the agricultural societies and the lyceums. But these did not have as much effect on extension as the farmers institutes. Extension work started with the people's desire to know the answers to problems that confronted them every day on their farms and in their homes. It "... is a product of the democratic form of government. Yet it is not a child of the government but of the people. It is an evolution spanning more than 170 years paralleling the early formation of our government and at last becoming a part of the government."<sup>40</sup>

The educational role of the Extension Service is very well emphasized in the Smith-Lever Act, it stated that:

In order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same, ....<sup>41</sup>

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<sup>38</sup>M. C. Burritt, The County Agent and the Farm Bureau (New York: Harcourt, Brace and Company, Inc., 1922), p. 196.

<sup>39</sup>Alfred Charles True, A History of Agricultural Education in the United States, 1785-1925 (Washington, D.C.: United States Government Printing Office, 1929), p. 119.

<sup>40</sup>Kansas Extension Service, op. cit., p. 2.

<sup>41</sup>Kelsey and Hearne, op. cit., p. 477.

Indeed, it is not just the handing of information to the people but also the application of methods and techniques in extension work that will encourage people to adopt new ideas and practices.

The Joint Committee Report on Extension Programs, Policies and Goals affirmed that "the primary function of the Cooperative Extension Service in agriculture and home economics is education."<sup>42</sup> The most effective way that the Extension Service can "help people help themselves" is through the long process of education. There is no shortcut to education. Extension has a tremendous job to accomplish and it is ever increasing in importance as a result of the rapid progress of science. In a democratic society every person has equal right to acquire knowledge.<sup>43</sup> Giving people who are not benefiting from residence college instruction equal opportunity to study and learn is the responsibility of the Extension Service and the Land Grant College system. It has to continually disseminate information relevant to the needs of the people. Being an educational agency "it must be increasingly concerned with

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<sup>42</sup> Subcommittee on Scope and Responsibility, The Cooperative Extension Service ... Today (Joint Committee Report on Extension Programs, Policies and Goals), p. 1.

<sup>43</sup> Kansas Extension Service, op. cit., p. 21.

changes in attitudes, so that people as individuals may progress to higher standards of accomplishment and living in an increasingly complex society."<sup>44</sup> Recalling the origin of Extension Service, it was born out of the people's need--to know the answers to their problems. There was at the time a great need to discover knowledge and when knowledge was discovered through the experiment station it was inevitable to recognize the need for the Extension Service and its vital function, so in 1914 the Extension Service was nationally and officially recognized through the Smith-Lever Act. By history, by philosophy, and by methods, it cannot be denied that Extension work is primarily educational in nature. "The people engaged in it must possess a good many abilities in common with teachers in schools. All teachers are directors of the learning process, and employ principles of sociology, psychology, and education."<sup>45</sup>

County Extension Agents recognize their role as educational. Studies on the perceived role of County Extension Agents showed that they perceived their role as that of an educator. In 1922 an inquiry made by Professor Crosby

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<sup>44</sup> Edmund deS. Brunner, Irwin T. Sanders, and Ensminger Douglas, Farmers of the World--The Development of Agriculture Extension (New York: Columbia University Press, 1945), p. 6.

<sup>45</sup> Carsie Hammonds, Teaching Agriculture (New York: McGraw-Hill Book Company, Inc., 1952), p. 304.

to forty Extension directors and 1,414 County Extension Agents indicated that the primary function of County Extension Agents is educational in character.<sup>46</sup> McCormick in his study among the Ohio County Extension Agents in 1958 found that 80 per cent of his respondents perceived their role as educational.<sup>47</sup> Abdul-Hadi's study among the Kansas County Extension Agents revealed that 76.5 per cent of the Kansas Agricultural Extension Agents perceived their role as educational.<sup>48</sup>

#### Training in the Educational Process

The Joint Committee Report on Extension Programs, Policies and Goals emphasized the need for training of extension workers to meet Extension's professional demands. Extension work being an educational profession "... demands an educational background especially designed to fit workers for the profession."<sup>49</sup> Understanding of the Educational Process is important and a basic requirement for the Extension worker. It is so important because the methods and techniques employed in teaching "... have a direct bearing

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<sup>46</sup> True, op. cit., p. 177.

<sup>47</sup> McCormick, op. cit., p. 85.

<sup>48</sup> Abdul-Hadi, op. cit., p. 53.

<sup>49</sup> Subcommittee on Scope and Responsibility, op. cit., p. 42.

upon the amount and quality of learning ...."<sup>50</sup> Competency in the Educational Process is inherent in the extension profession being primarily concerned in changing people's behavior. No one can possibly change people's behavior without employing the principles of the Educational Process. "Without this how does one know, for example, what kind of subject matter to use, what kind of teaching procedures and techniques of communication to use, or how much time and effort to allocate to the task."<sup>51</sup>

In the ranking of the nine general areas of competency, the Educational Process was ranked 7th by the respondents of Abdul-Hadi, McCormick, and Price, according to their expressed training needs. According to importance of the nine general areas the respondents in Abdul-Hadi's study ranked the Educational Process 6th, in McCormick's study it was ranked 5th, and in Price's study it was ranked 6.5th. Abdul-Hadi's respondents were the Kansas Agricultural Agents,<sup>52</sup> McCormick's were the Ohio County Agents,<sup>53</sup>

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<sup>50</sup>M. C. Wilson and Gladys Gallup, (Extension Service Circular 495, Federal Extension Service, U.S.D.A., August, 1955), p. 3.

<sup>51</sup>Paul J. Leagans, "Competencies Needed by Extension Workers," Report of Conference on Extension Training (Ithaca, New York: Cornell University, 1957), p. 8.

<sup>52</sup>Abdul-Hadi, op. cit., pp. 63-64.

<sup>53</sup>McCormick, op. cit., p. 20.

and Price's were the Arkansas County Agents.<sup>54</sup> Fifty-four and six tenths per cent of the Ohio County Agents had their undergraduate major in Agricultural Education, Home Economics Education, and General Education. Of the Arkansas County Agents, 20 per cent had their undergraduate major in Agricultural Education and Home Economics Education. Eighteen per cent of the Kansas Agricultural Agents majored in Agricultural Education during their undergraduate work. The rank order correlation between training needs expressed by the County Agents and their opinion as to how important it was for a County Agent to receive training in certain areas of the nine general areas of competency was 0.43 for the Ohio County Agents,<sup>55</sup> and 0.216 for the Kansas Agricultural Agents.<sup>56</sup> In both computations rho was used. These are low correlations. The difference between the Ohio County Agents and the Kansas Agricultural Agents in the per cent of County Agents with undergraduate major in the field of education could be one of the reasons why the Ohio County Agents ranked the Educational Process higher than the Kansas Agricultural Agents in importance. Slightly over 55 per cent of the Ohio County Agents had their

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<sup>54</sup>Price, op. cit., pp. 154-156.

<sup>55</sup>McCormick, op. cit., p. 91.

<sup>56</sup>Abdul-Hadi, op. cit., p. 64.

undergraduate major in the field of education while only 18 per cent of the Kansas Agricultural Agents had their undergraduate major in education. McCormick explained this case as "a phenomenon which is not unusual to observe is that a person feels the areas in which he is most highly trained and most competent are the most important."<sup>57</sup>

In Abdul-Hadi's study one of his recommendations was for the training program of the Kansas Agricultural Agents to place more emphasis on the educational role. The need for training in the Educational Process is increased for the Kansas Agricultural Agents because of their inadequate training in the Educational Process.

It appears that the Kansas Agricultural Agents do not see clearly their need for training in the Educational Process. McCormick, in his study suggested that, "... the traditional method of planning district training conferences through agent's suggestions to a committee may not be providing programs that meet the in-service training needs of the agents."<sup>58</sup> He also stated that "supervisors are the key individuals in identifying the training needs of Extension Agents and in counseling and guiding agents in their training program." Kansas Extension Agents expressed their

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<sup>57</sup>McCormick, op. cit., p. 91.

<sup>58</sup>Ibid., p. 152.

greatest training needs in the area of subject matter.

To be able to teach effectively requires not only the mastery of subject matter but also the methods and techniques of teaching. "It is not uncommon for a person with a high level of technical training to be relatively ineffective in imparting his knowledge to others. While it may be true that some teachers are 'born not made' it is equally true that any teacher can benefit greatly from the rapidly growing body of knowledge about effective teaching tools and techniques."<sup>59</sup> A wise selection of the different methods, techniques and tools can produce maximum result in changing people's behavior. As illustrated by Kelsey and Hearne, people are influenced to change in proportion to the number of different teaching methods with which they come in contact. The more people are exposed to the different methods and techniques of teaching the more they will respond to change.<sup>60</sup> This indicates that in order for extension agents to be effective as educators they require adequate training in the Educational Process.

Since Extension work is primarily an educational task, its personnel should have sufficient knowledge of the

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<sup>59</sup>L. T. York, "The Professional and His Journal," Journal of Cooperative Extension, Vol. 1 (Spring, 1963), p. 6.

<sup>60</sup>Kelsey and Hearne, op. cit., p. 270.

Educational Process. County Agents being primarily educators in an informal educational system must utilize every extension activity to promote education. Without an understanding of teaching and learning process an agent cannot be effective in his work. The various activities are all learning situations which the extension worker has to enrich with selected methods, techniques, and tools of education. Training in the Educational Process is important for all educators. "If the goal of the Extension Service is to effect behavior changes in the people they serve through education, then it becomes quite evident that professional Extension personnel must continually strive to improve their own abilities and efficiency through training."<sup>61</sup>

#### Summary

Nothing could be found in studies and other literature which would indicate that education is not a primary function of Extension. Literature in Extension has affirmed the fact that education is the primary function of Extension. Competency in the Educational Process is of great importance for all County Extension Agents.

Administrators in Extension know how important it is to train County Extension Agents in the Educational

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<sup>61</sup>McCormick, op. cit., p. 42.

Process. The studies of McCormick, Price, and Abdul-Hadi cited previously have pointed up the inadequacy of undergraduate training in the Educational Process.

The Kansas Agricultural Extension Agents are very much in need of training in the Educational Process because their undergraduate training in the Educational Process is insufficient. The studies by McCormick and Price have indicated that Extension Agents in general have insufficient undergraduate training in the Educational Process. We can assume that in Kansas it is not only the Agricultural Extension Agents who need very much training in the Educational Process but all County Extension Agents.

Training is recognized by administrators in Business, Industry, Education, and Extension to be an integral part of the organization. It is training that increase proficiency, keeps employees up-to-date with new developments, and develops good human relations.

## CHAPTER III

### THE EXPRESSED TRAINING NEEDS OF KANSAS COUNTY AGENTS IN THE TWELVE SPECIFIC AREAS OF THE EDUCATIONAL PROCESS

#### Introduction

One of the nine general areas of competency identified by the National Task Force on Cooperative Extension Inservice Training was the "Educational Process."

McCormick developed a questionnaire in which the basic elements were the nine general areas of competency identified by the National Task Force.<sup>1</sup> He made detailed subdivisions of each of the nine general areas of competency with the assistance of the members of the National Task Force. The subdivisions or specific areas of the Educational Process determined by McCormick were used in this study. The following were the specific areas:<sup>2</sup>

1. Understanding how people learn.
2. Understanding the effect of the differences in individuals on the teaching-learning process.
3. Understanding the relation of experience to learning.
4. Understanding the relation of learning to what we perceive (see, feel and hear) through our senses.

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<sup>1</sup>McCormick, op. cit., p. 11.

<sup>2</sup>Ibid., p. 217.

5. Understanding the relationship between the need for and usefulness of subject matter information to learning.
6. Understanding the relation of interest to learning.
7. Knowledge of the principles and procedures in teaching adults.
8. How to develop and use teaching methods.
9. Knowledge of the background and history of education.
10. Understanding the psychological theories of learning.
11. Understanding the philosophies of education.
12. Understanding how to motivate people.

Before going into the detailed analysis of the expressed training needs of Kansas County Agents it is fitting to illustrate at this point how Kansas County Agents ranked the Educational Process according to training needs and also according to importance in order to be successful in the job. It was pointed out in the review of literature that Ohio County Agents,<sup>3</sup> Arkansas County Agents<sup>4</sup> and Kansas County Agricultural Agents<sup>5</sup> ranked the Educational Process 7th among the nine general areas of competency according to the training they felt they needed in these

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<sup>3</sup>Ibid., p. 20.

<sup>4</sup>Price, op. cit., pp. 154-156.

<sup>5</sup>Abdul-Hadi, op. cit., pp. 63-64.

general areas. According to importance of the nine general areas, the Educational Process was ranked 6th, 5th, and 6.5th by Kansas Agricultural Agents, Ohio County Agents, and Arkansas County Agents respectively.

Using the same information, to the response of Abdul-Hadi's questionnaires in his analysis of the expressed training needs of Kansas Agricultural Agents, the rank of the Educational Process according to training needed and importance by Kansas County Agents was found. Tables II and III show these rankings. According to training needed (see Table II), the Agricultural Agents, the Home Economics Agents and the 4-H Club Agents ranked the Educational Process 7th, 7th and 3rd respectively. The 4-H Club Agents felt they needed more training in the Educational Process than either the Agricultural Agents or the Home Economics Agents. According to importance of the Educational Process (see Table III) the ranks were 6th, 5th and 5th, by the Agricultural Agents, the Home Economics Agents and the 4-H Club Agents respectively. It appears that the Home Economics Agents and the 4-H Club Agents attached slightly more importance to the Educational Process than did the Agricultural Agents. Among the three groups of Kansas County Agents the 4-H Club Agents felt they needed much training in the Educational Process having ranked it 3rd compared to 7th by both Agricultural Agents and Home Economics

TABLE II

TRAINING NEEDED-RANK ORDER AND PERCENTAGE DISTRIBUTION OF  
THE NINE GENERAL AREAS OF COMPETENCY BY KANSAS COUNTY  
AGENTS BY POSITION

General Areas of Competency	Position					
	Agri. Agents N=98		H. E. Agents N=80		4-H Agents N=25	
	%	Rank	%	Rank	%	Rank
Technical Knowledge	93.9	1	92.4	3	78.3	8.5
Research	86.7	2	96.2	2	100	4.5
Effective Thinking	79.6	3	96.2	1	92	1
Program Planning and Development	71.1	4	82.3	4	88	4.5
Human Development	73.5	5	83.5	5	88	6.5
Communication	67.3	6	67.5	8	84	8.5
The Educational Process	70.4	7	72.5	7	84	3
Social Systems	68.4	8	79.7	6	88	6.5
Extension Organization and Administration	53.7	9	54.5	9	78.3	8.5

TABLE III

IMPORTANCE-RANK ORDER AND PERCENTAGE DISTRIBUTION OF  
THE NINE GENERAL AREAS OF COMPETENCY BY KANSAS  
COUNTY AGENTS BY POSITION

General Areas of Competency	Position					
	Agri. Agents N=98		H. E. Agents N=80		4-H Agents N=25	
	%	Rank	%	Rank	%	Rank
Technical Knowledge	100	1	98.8	1	100	3.5
Program Planning and Development	96.9	2	100	3	100	3.5
Communication	95.9	3	100	2	100	1.5
Extension Organization and Administration	94.8	4	97.5	4	100	1.5
Research	100	5	100	8	100	6
The Educational Process	94.9	6	100	5	100	5
Human Development	89.8	7	100	6	100	8
Social Systems	91.8	8	100	9	100	8
Effective Thinking	95.9	9	100	7	100	8

Agents. Both the Agricultural Agents and the Home Economics Agents ranked the Educational Process according to importance, a rank higher than they ranked it according to the training they felt they needed.

### Analysis and Interpretation of Data

The "analysis and interpretation of data" deals with some factors which might be associated with the expressed training needs of Kansas County Agents. The factors were position group, undergraduate major, degree held, and role perception. Descriptive statistical techniques were used in this study. In the analysis of the data percentage distribution, rank order, coefficient of rank correlation ( $\rho$ ), and coefficient of concordance were used.

The coefficient of rank correlation was determined by using the Spearman rank correlation coefficient ( $r_s$ ) or  $\rho$  to illustrate the agreement between two groups of County Agents in their training needs in the Educational Process.

The formula is:

$$r_s = 1 - \frac{6 \sum di^2}{N^3 - N}$$

To compute  $r_s$  make a list of  $N$  subjects. Next to each subjects entry, enter his rank for the  $X$  variables and his ranks for the  $Y$  variables. Determine then the various values of  $di$  = the difference between the two ranks. Square each  $di$ , and then sum all values of  $di^2$  to obtain  $\sum di^2$ . Then enter this value to  $N$  (the

number of subjects) directly to the above.<sup>6</sup>

The coefficient of concordance (W) was used to show the agreement among Kansas County Agent position groups in their expressed training need in the Educational Process. The coefficient of concordance was used only for the analysis of the first hypothesis. The formula of the coefficient of concordance is:

$$W = \frac{s}{1/12 k^2 (N^3 - N)}$$

To compute W, we first find the sum of ranks, R<sub>j</sub>, in each column of a KxN Table. Then we sum the R<sub>j</sub> and divide that sum by N to obtain the mean value of the R<sub>j</sub>. Each of the R<sub>j</sub> may then be expressed as a deviation from the mean value. (The larger the deviations, the greater is the degree of association among the K sets of ranks.) Finally, s, the sum of squares of these deviations, is found.<sup>7</sup>

Each analysis begins with an hypothesis. The data were gathered from the responses of Kansas County Agents to the questionnaire administered by Abdul-Hadi, and were used in this study to accept or reject the hypotheses through the use of the descriptive statistical techniques. The author accepted the null hypothesis when the association was below the .600 level and rejected it when the association was above .600. The following were the terms used

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<sup>6</sup> Sidney Siegel, Nonparametric Statistics for the Behavioral Science (New York: McGraw-Hill Book Company, 1956), p. 204.

<sup>7</sup> Ibid., p. 230.

signifying different levels of agreement:

1.	Perfect agreement	-----	1.000
2.	Very high "	-----	0.900-0.999
3.	High "	-----	0.701-0.899
4.	Slightly high "	-----	0.601-0.700
5.	Slightly low "	-----	0.501-0.600
6.	Low "	-----	0.301-0.500
7.	Very low "	-----	0.001-0.300
8.	Perfect disagreement	-----	0.000

The following terms were used to signify agreement between two groups of respondents in a rank:

1.	Perfect agreement	-----	0.0
2.	Very high "	-----	0.5-1.9
3.	High "	-----	2.0-3.9
4.	Fairly high "	-----	4.0-5.9
5.	Fairly low "	-----	6.0-7.9
6.	Low "	-----	8.0-9.9
7.	Very low "	-----	10.0-10.9
8.	Perfect disagreement	-----	11.0

Each analysis of the hypothesis is presented by a discussion of the data. Only the three highest ranks and the three lowest ranks were used. The three highest ranks were arranged from the highest to the lowest and the three lowest were arranged from the lowest to the highest.

The Association Between the Expressed Training Needs of  
Kansas County Agents in the Specific Areas of the  
Educational Process and Position Group

The expressed training needs of the Kansas County Agents were analyzed in order to determine the association between and among position groups and expressed training needs.

The three position groups were as follows:

1. Agricultural Agents
2. Home Economics Agents
3. 4-H Club Agents

Hypothesis: There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and position group.

Table IV shows the rank order of the twelve specific areas of the Educational Process and the percentage distribution of Kansas County Agents by position group according to their expressed training needs.

Among the Agricultural Agents the three specific areas which were ranked highest were the following:

1. Understanding how to motivate people.
2. Knowledge of the principles and procedures of teaching adults.
3. How to develop and use teaching methods.

A tie for second place in rank was observed between "knowledge of the principles and procedures of teaching

TABLE IV

RANK ORDER AND PERCENTAGE DISTRIBUTION OF EXPRESSED  
TRAINING NEEDS OF KANSAS COUNTY AGENTS IN THE  
TWELVE SPECIFIC AREAS OF THE EDUCATIONAL  
PROCESS BY POSITION GROUP

Specific areas of the Educational Process	Position group					
	Agri. Agent N=97		H.E. Agent N=74 <sup>a</sup>		4-H Agent N=23	
	%	Rank	%	Rank	%	Rank
Understanding how to motivate people.	75.3	1	82.4	1	95.7	1
Knowledge of the prin- ciples and procedures of teaching adults.	72.2	2.5	75.7	2	87.0	3
How to develop and use teaching methods.	70.1	2.5	75.7	3	87.0	2
Understanding the psy- chological theories of learning.	63.9	4	71.6	4	90.9 <sup>a</sup>	5
Understanding the philosophies of education.	60.4 <sup>a</sup>	5	63.5	5.5	82.6	7
Effect of individual differences on teach- ing-learning process.	54.6	6	59.5	7	78.3	6
Relation between need and usefulness of sub- ject matter informa- tion to learning.	55.7	7	59.5	5.5	82.6	4
Understanding how people learn.	51.5	8	54.1	9	60.9	8.5
Relation of interest to learning.	47.4	9	41.4	8	60.9	10
Knowledge of the back- ground and history of education.	47.4	10	44.6	12	60.9	12

TABLE IV (continued)

Specific areas of the Educational Process	Position group					
	Agri. Agent N=97		H.E. Agent N=74 <sup>a</sup>		4-H Agent N=23	
	%	Rank	%	Rank	%	Rank
Relation of learning to experience.	44.3	11	43.2	11	65.2	8.5
Relation of learning to what we perceive.	42.3	12	44.6	10	65.2	11

<sup>a</sup>One did not answer.

adults" and "how to develop and use teaching methods," but "knowledge of the principles and procedures of teaching adults" had a higher percentage.

The three specific areas that the Agricultural Agents ranked lowest were the following:

1. Relation of learning to what we perceive.
2. Relation of experience to learning.
3. Knowledge of the background and history of education.

The Home Economics Agents gave the highest rank to the following three specific areas:

1. Understanding how to motivate people.
2. Knowledge of the principles and procedures of teaching adults.
3. How to develop and use teaching methods.

In percentage "knowledge of the principles and procedures of teaching adults" and "how to develop and use teaching methods" tied but the first was a rank higher than the latter.

The three specific areas that the Home Economics Agents ranked lowest were the following:

1. Knowledge of the background and history of education.
2. Relation of experience to learning.
3. Relation of learning to what we perceive.

"Knowledge of the background and history of education" was two ranks lower than "relation of learning to

what we perceive" but they tied in percentage.

The 4-H Club Agents gave the three highest ranks to the following specific areas:

1. Understanding how to motivate people.
2. How to develop and use teaching methods.
3. Knowledge of the principles and procedures of teaching adults.

A tie in percentage was observed between "how to develop and use teaching methods" and "knowledge of the principles and procedures of teaching adults."

The lowest three ranks were given by the 4-H Club Agents to the following three specific areas:

1. Knowledge of the background and history of education.
2. Relation of learning to what we perceive.
3. Relation of interest to learning.

"Relation of interest to learning" and "knowledge of the background and history of education" were tied in percentage but the latter was two ranks lower than the first.

The coefficient of rank correlation between Kansas County Agents by position group were the following:

1. Agri. Agents-H. E. Agents -----.951
2. H. E. Agents-4-H Club Agents -----.930
3. 4-H Club Agents-Agri. Agents -----.906

The coefficient of rank correlation between all of the three pairs of Kansas County Agents by position groups

in the twelve specific areas of the Educational Process without consideration of situational and personal factors was very high. All the three possible pairs of Kansas County Agent position groups ranked highest the same specific areas and in the same order, except for the 4-H Club Agent-Agricultural Agent pair which ranked "how to develop and use teaching methods" second. The other two pairs ranked third. The same three specific areas were ranked lowest by the three pairs of Kansas County Agent position groups. The three lowest specific areas were not ranked in the same order.

To determine the agreement among the Kansas County Agent position groups in their expressed training needs in the twelve specific areas of the Educational Process the coefficient of concordance ( $W$ ) was used. The coefficient of concordance was .949. This was a very high association. The expressed training needs of Kansas County Agent position groups were very highly associated, it was close to perfect association. The hypothesis was rejected.

The Association Between the Expressed Training Needs  
of Kansas County Agents in the Specific Areas of  
the Educational Process and Undergraduate Major

The Kansas County Agents had their undergraduate majors in Agricultural Education, Home Economics Education, Agricultural Economics, Agronomy, Animal Husbandry, Dairy, Foods and Nutrition, Clothing, and others. Among those who

majored in the field of Education were 17.5 per cent of the Agricultural Agents, 64 per cent of the Home Economics Agents and 8.7 per cent of the 4-H Club Agents. Those who majored in Technical Subject Matter were 82.5 per cent of the Agricultural Agents, 36 per cent of the Home Economics Agents, and 91.3 per cent of the 4-H Club Agents. The overall percentage of Kansas County Agents with Education undergraduate major was 30.4 per cent and 69.6 per cent for the Technical Subject Matter undergraduate major.

The expressed training needs of Kansas County Agents were analyzed by Education undergraduate and Technical Subject Matter undergraduate major to determine whether undergraduate major was associated with the expressed training needs of Kansas County Agents.

Hypothesis: There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and undergraduate major.

Table V shows the rank order of the twelve specific areas of the Educational Process and the percentage distribution of Kansas County Agents by undergraduate major according to their expressed training needs.

The Kansas County Agents with Education undergraduate major ranked the following three specific areas highest:

TABLE V

RANK ORDER AND PERCENTAGE DISTRIBUTION OF EXPRESSED  
TRAINING NEEDS OF KANSAS COUNTY AGENTS IN THE  
TWELVE SPECIFIC AREAS OF THE EDUCATIONAL  
PROCESS BY UNDERGRADUATE MAJOR

Specific areas of the Educational Process	Undergraduate major			
	Education N=64 <sup>a</sup>		Tech. Subj. Matter N=130	
	%	Rank	%	Rank
Understanding how to motivate people.	71.87	1	84.62	1
How to develop and use teaching methods.	67.18	2	77.69	3
Knowledge of the prin- ciples and procedures of teaching adults.	62.50	3	81.54	2
Understanding the psycho- logical theories of learning.	59.37	4	75.19 <sup>a</sup>	4
Understanding the phil- osophies of education.	56.25	5	68.22 <sup>a</sup>	5
Relation between need and usefulness of sub- ject matter information to learning	53.12	6	63.84	6
Relation of interest to learning.	42.18	7	54.62	8
Knowledge of the back- ground and history of education.	43.75	8	52.85 <sup>b</sup>	11
Relation of learning to experience.	35.93	9.5	51.54	9
Relation of learning to what we perceive.	37.50	9.5	50.00	10

TABLE V (continued)

Specific areas of the Educational Process	Undergraduate major			
	Education: N=64 <sup>a</sup>		Tech. Subj. Matter N=130	
	%	Rank	%	Rank
Effect of individual difference on teaching- learning process.	50.00	11	63.84	12
Understanding how people learn.	42.18	12	59.23	7

<sup>a</sup>One did not answer.

<sup>b</sup>Seven did not answer.

1. Understanding how to motivate people.
2. How to develop and use teaching methods.
3. Knowledge of the principles and procedures of teaching adults.

Lowest ranks were given by the Education undergraduate major to the following specific areas:

1. Understanding how people learn.
2. Effect of individual differences on teaching-learning process.
3. Relation of learning to what we perceive.

A tie was observed between "relation of learning to what we perceive" and "relation of experience to learning" but the first was higher in percentage than the latter. This indicates that "relation of experience to learning" was ranked higher by each County Agent who responded to the item than "relation of learning to what we perceive" by County Agents who responded to it.

Among Kansas County Agents whose undergraduate major was in Technical Subject Matter the three specific areas which were ranked highest were the following:

1. Understanding how to motivate people.
2. Knowledge of the principles and procedures of teaching adults.
3. How to develop and use teaching methods.

The three lowest ranks were given by the Kansas County Agents with Technical Subject Matter undergraduate major to the following specific areas:

1. Effect of individual differences on teaching-learning process.
2. Knowledge of the background and history of education.
3. Relation of learning to what we perceive.

The specific area where the undergraduate major groups differed the most was in "understanding how people learn" with the Education major group giving it the lower rank. The rank difference was 5 which was a fairly high agreement.

The coefficient of rank correlation between the Education and Technical Subject Matter undergraduate majors was .858. This was a high association.

Both undergraduate major groups ranked highest the same three specific areas and in the same rank order. Also, both groups ranked lowest the same two specific areas. Of the twelve specific areas not one was observed where the group had complete disagreement. The highest observed disagreement was 5 rank difference which is fairly low.

Kansas County Agents with an Education undergraduate major indicated less need for training in the Educational Process than those with a Technical Subject Matter undergraduate major. This was expected because the County Agents with undergraduate majors in Education had had training in these specific areas in variable degrees. This is one indication that Kansas County Agents with Education

undergraduate major felt the need for training in the specific areas of the Educational Process but not as much as the Kansas County Agents with Technical Subject Matter undergraduate major. The hypothesis was rejected.

The Association Between the Expressed Training Needs of  
Kansas County Agents in the Specific Areas of the  
Educational Process and Degree Held

Fifteen and five tenths per cent of Kansas County Agricultural Agents held Master's degrees, 5.3 per cent of the Home Economics Agents and 13 per cent of the 4-H Club Agents held Master's degrees. No one held a Doctor's degree. Of those who held Master's degrees, their major fields were in Education, Agricultural Education, Home Economics Education, Extension Education, Biological Science, Home Economics and others. Sixty-four per cent of the Master's degree held group had their graduate major in the field of Education. The over all percentage of the Kansas County Agents who held Master's degrees was 11.33 per cent.

The expressed training needs of Kansas County Agents were analyzed by County Agents with Bachelor's degree and with Master's degree to determine whether an advanced degree was associated with the expressed training needs of Kansas County Agents.

Hypothesis: There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and degree held.

Table VI shows the rank order of the twelve specific areas of the Educational Process and the percentage distribution of Kansas County Agents by degree held according to their expressed training needs.

Kansas County Agents with Bachelor's degree ranked the following three specific areas as highest:

1. Understanding how to motivate people.
2. How to develop and use teaching methods.
3. Knowledge of the principles and procedures of teaching adults.

The three specific areas ranked lowest by the Kansas County Agents with Bachelor's degree were the following:

1. Knowledge of the background and history of education.
2. Relation of learning to what we perceive.
3. Relation of experience to learning.

Kansas County Agents with Master's degrees gave the highest three ranks to the following specific areas:

1. Understanding how to motivate people.
2. Understanding the psychological theories of learning.
3. Knowledge of the principles and procedures of teaching adults.

The lowest three ranks were given by the County Agents with Master's degree to the following specific areas:

1. Relation of learning to what we perceive.
2. Relation of experience to learning.

TABLE VI

RANK ORDER AND PERCENTAGE DISTRIBUTION OF EXPRESSED  
TRAINING NEEDS OF KANSAS COUNTY AGENTS IN THE  
TWELVE SPECIFIC AREAS OF THE EDUCATIONAL  
PROCESS BY DEGREE HELD

Specific areas of the Educational Process	Degree held			
	Bachelor's N=172 <sup>a</sup>		Master's N=22	
	%	Rank	%	Rank
Understanding how to motivate people.	81.39	1	72.73	1
How to develop and use teaching methods.	77.91	2	45.45	4.5
Knowledge of the prin- ciples and procedures of teaching adults.	78.49	3	50.00	3
Understanding the psy- chological theories of learning.	70.76 <sup>a</sup>	4	63.64	2
Relation between need and usefulness of sub- ject matter information to learning.	62.21	5	45.45	7
Effect of individual differences on teaching- learning process.	60.47 <sup>a</sup>	6.5	50.00	6
Understanding the phil- osophies of education.	64.91	6.5	59.09	4.5
Understanding how people learn.	55.23	8.5	40.91	8.5
Relation of interest to learning.	52.91	8.5	31.82	8.5
Relation of learning to experience.	48.26	10	31.82	10.5

TABLE VI (continued)

Specific areas of the Educational Process	Degree held			
	Bachelor's N=172 <sup>a</sup>		Master's N=22	
	%	Rank	%	Rank
Relation of learning to what we perceive.	47.67	11	31.82	12
Knowledge of the back- ground and history of education.	49.42	12	36.36	10.5

<sup>a</sup>One did not answer.

3. Knowledge of the background and history of education.

Among the specific areas that showed the greatest difference between Kansas County Agents according to degree held, "how to develop and use teaching methods" showed the greatest with a difference of 2.5 ranks.

The coefficient of rank correlation between the Bachelor's and Master's degree groups was .923. This association was very high.

Of the three highest ranks both degree groups agreed in two places, they disagreed in the second rank. For the three lowest ranks both groups gave the three lowest places to the same specific areas, however they disagreed in the rank order. The observed highest rank difference among the twelve specific areas was 2.5 ranks which was a high agreement.

In all the specific areas the percentage of the Master's degree group was lower than the Bachelor's degree group. This is not surprising because 64 per cent of the Master's degree group had their graduate major in the field of Education while only 30.4 of the Bachelor's degree group had their undergraduate major in the field of Education. This implies that the Master's degree group in general feel the need for training in the specific areas of the Educational Process but not as great as the Bachelor's degree group. The hypothesis was rejected.

The Association Between the Expressed Training Needs  
of Kansas County Agents in the Specific Areas of  
the Educational Process and Role Perception

To determine the perceived role of Kansas County Agents they were asked to describe their job by checking one of the following statements:

1. A professional agriculturalist, home economist, or youth worker available to provide information for the people of your community.
2. A professional agriculturalist, home economist or youth worker providing service to the people of your county.
3. A professional educator developing educational programs with people to effect behavior changes in the people of your county.
4. A professional educator developing programs to help people help themselves.
5. A professional organizer of educational activities for the people of your county.

Those who checked statements 1 or 2 were assumed to perceive their role as non-educational and those who checked statements 3, 4 or 5 were assumed to perceive their role as educational. The responses were distributed as follows:

Statement No. 1	----	8.2%
Statement No. 2	----	5.6%
Statement No. 3	----	53.3%
Statement No. 4	----	30.8%
Statement No. 5	----	2.1%

Of all the Kansas County Agents 13.8 per cent perceived their role as non-educational and 86.2 per cent

perceived their role as educational.

**Hypothesis:** There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and role perception.

Table VII shows the rank order of the twelve specific areas of the Educational Process and the percentage distribution of Kansas County Agents by role perception according to their expressed training needs.

Kansas County Agents who perceived their role as educational ranked the following three specific areas highest:

1. Understanding how to motivate people.
2. Knowledge of the principles and procedures of teaching adults.
3. How to develop and use teaching methods.

The following three specific areas were ranked lowest by Kansas County Agents who perceived their role as educational:

1. Knowledge of the background and history of education.
2. Relation of learning to what we perceive.
3. Relation of experience to learning.

Kansas County Agents who perceived their role as non-educational ranked the following three specific areas highest:

1. Understanding how to motivate people.

TABLE VII

RANK ORDER AND PERCENTAGE DISTRIBUTION OF EXPRESSED  
TRAINING NEEDS OF KANSAS COUNTY AGENTS IN THE  
TWELVE SPECIFIC AREAS OF THE EDUCATIONAL  
PROCESS BY ROLE PERCEPTION

Specific areas of the Educational Process	Role perception			
	Educational N=167		Non-Educational N=27	
	%	Rank	%	Rank
Understanding how to motivate people.	79.64	1	85.19	1
Knowledge of the prin- ciples and procedures of teaching adults.	74.85	2	77.78	4
How to develop and use teaching methods.	73.05	3	81.48	2
Understanding the psy- chological theories of learning.	69.69 <sup>a</sup>	4	74.07	5
Relation between need and usefulness of sub- ject matter information to learning.	59.28	5	66.67	7
Understanding the phil- osophies of education.	62.87	6	73.08 <sup>b</sup>	6
Effect of individual differences on teaching- learning process.	56.89	7	62.96	3
Relation of interest to learning.	45.51	8	44.44	12
Understanding how people learn.	50.89	9	59.26	9.5
Relation of learning to experience.	45.51	10	51.85	8

TABLE VII (continued)

Specific areas of the Educational Process	Role perception			
	Educational N=167		Non-Educational N=27	
	%	Rank	%	Rank
Relation of learning to what we perceive.	44.31	11	55.56	9.5
Knowledge of the back- ground and history of education.	47.31	12	51.85	11

<sup>a</sup>Two did not answer.

<sup>b</sup>One did not answer.

2. How to develop and use teaching methods.
3. Effect of individual differences on teaching-learning process.

The specific areas that were ranked lowest by the Kansas County Agents who perceived their role as non-educational were the following:

1. Relation of interest to learning.
2. Knowledge of the background and history of education.
3. Understanding how people learn.

"Understanding how people learn" tied with "relation of learning to what we perceive" in rank. The percentage was used to break the tie. Since "understanding how people learn" had a higher percentage by individual responses it was given lesser value than "relation of learning to what we perceive."

There were two specific areas that had highest rank differences between the two Kansas County Agent role perception groups by 4 rank difference. The two specific areas were "effect of individual differences on teaching-learning process" and "relation of interest to learning."

The coefficient of rank correlation between the Educational role and Non-Educational role groups was .827. This was a high association in the expressed training needs of the Kansas County Agents in the specific areas of the Educational Process.

The Kansas County Agent role perception groups ranked the same two specific areas for the highest three places and did not agree in one specific area to be among one of the three highest places. They did not agree in the order of ranking of the three highest specific areas except "understanding how to motivate people" for the first place. Neither did the groups agree in the rank order of the lowest ranked three specific areas. In only one specific area of the three ranked lowest did they have the same but not in the same rank.

A high percentage of the Kansas County Agents perceived their role as Educational. This was an evidence that Kansas County Agents received training in the Educational Process. The slightly low percentage of the Educational role group indicating a need for training in the Educational Process is not a negative influence of Educational role perception on expressed training need but an indication that Kansas County Agents have received training in the Educational Process through preservice training, induction training, inservice training, or graduate training and that they feel they need more training in the Educational Process. On the contrary Educational role perception is positively associated with expressed training needs. The hypothesis was rejected.

Summary

Kansas County Agents had a high degree of agreement in their expressed training needs in the specific areas of the Educational Process. The coefficient of rank correlation between different groups of Kansas County Agents were as follows:

1. Position
  - a. Agri. Agents-H. E. Agents ----- .951
  - b. H. E. Agents-4-H Club Agents ----- .930
  - c. 4-H Club Agents-Agri. Agents ----- .906
2. Undergraduate Major
  - a. Education-Tech. Subject Matter ----- .858
3. Degree Held
  - a. Bachelor's-Master's ----- .923
4. Role Perception
  - a. Non-Educational-Educational ----- .827

The coefficient of concordance among Kansas County Agents by position groups was .949. This indicates a very high agreement among Kansas County Agent groups in their expressed training needs in the specific areas of the Educational Process.

Of the twelve specific areas ranked by the Kansas County Agent groups the three highest ranks were the following:

1. Understanding how to motivate people.

2. Knowledge of the principles and procedures of teaching adults.
3. How to develop and use teaching methods.

There was perfect agreement by all the different Kansas County Agent groups in the first place ranking of "understanding how to motivate people."

It was the consensus of all Kansas County Agent groups to rank the above three specific areas of the Educational Process as the first three specific areas that they need training except the Master's degree group which indicated "understanding the psychological theories of learning" instead of "how to develop and use teaching methods" and the Non-Educational group which indicated "effect of individual differences on teaching-learning process" instead of "knowledge of the principles and procedures of teaching adults."

Kansas County Agent groups felt they needed the least training in the following three specific areas of the Educational Process:

1. Relation of learning to what we perceive.
2. Relation of experience to learning.
3. Knowledge of the background and history of education.

Most groups indicated they needed the least amount of training in the three specific areas above. The Education undergraduate major group indicated least training

needed in "understanding how people learn" and "effect of individual differences on teaching-learning process" instead of "relation of experience to learning" and "knowledge of the background and history of education." The Technical Subject Matter group indicated least training needed in "effect of individual differences on teaching-learning process" instead of "relation of experience to learning." The Non-Educational role group indicated least training needed in "understanding how people learn" instead of "knowledge of the background and history of education." The Kansas County Agent groups did not agree in their ranking of the three specific areas in which they felt the least need for training.

## CHAPTER IV

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to determine and compare the expressed training needs of Kansas County Agents in the twelve specific areas of the Educational Process.

The specific objectives of this study were (1) to determine the training needs of Kansas County Agents according to their expressed training needs in the specific areas of the Educational Process, (2) to identify some of the personal and situational factors which are associated with the expressed training needs of Kansas County Agents in the specific areas of the Educational Process, and (3) to determine the degree to which the three Kansas County Agent position groups agree in their expressed training needs in the specific areas of the Educational Process.

The respondents in this study were the Agricultural Agents, the Home Economics Agents and the 4-H Club Agents of the Kansas Extension Service who had been on the job at least one year as of July 1962.

The data used in this study were collected by Abdul-Hadi<sup>1</sup> through the use of a mailed questionnaire for

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<sup>1</sup>Nazeeh Abdul-Hadi, "An Analysis of the Expressed Training Needs of County Agricultural Extension Agents in Kansas" (unpublished Master's thesis, Kansas State University, Manhattan, Kansas, 1963).

his study on the analysis of the expressed training needs of the County Agricultural Agents in Kansas. The data were precoded and punched on IBM cards. The IBM machine in the Kansas State University Statistic Department was used in the processing of the data.

The data were presented in the form of tables and were analyzed by means of percentage distribution, rank order, coefficient of rank correlation and coefficient of concordance in order to accept or reject the null hypotheses.

#### Summary and Conclusions

Hypothesis 1: There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and position group.

All the position groups ranked highest the same three specific areas among the twelve specific areas. The three specific areas in which they felt they needed the most training were "understanding how to motivate people," "knowledge of the principles and procedures of teaching adults" and "how to develop and use teaching methods." In the training program these three specific areas should be given priority.

Since the coefficient of concordance was very high general training for all Kansas County Agents irrespective of position is advisable in the twelve specific areas of

the Educational Process. Individual differences in the specific areas of the Educational Process as far as training needed is concerned was very slight. Only about five out of one hundred Kansas County Agents would differ in training needed.

The coefficient of concordance among Kansas County Agent position groups was .949. The hypothesis was rejected. Hypothesis 2: There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and undergraduate major.

Both of the undergraduate major groups ranked highest the same three specific areas among the twelve specific areas. The three specific areas in which they felt they needed the most training were "understanding how to motivate people," "knowledge of the principles and procedures of teaching adults" and "how to develop and use teaching methods."

Kansas County Agents with an undergraduate major in Education indicated less need for training in the Educational Process than those with Technical Subject Matter undergraduate major. Undergraduate major has no influence in the expressed training needs of the Kansas County Agents.

The high percentage of the Technical Subject Matter undergraduate major group indicating the need for training

in the Educational Process was an influence of the induction training and inservice training in the Educational Process, without which the percentage would have been low.

Training in the Educational Process should be given to all Kansas County Agents regardless of their undergraduate major, as indicated by the high agreement in the expressed training needs of Kansas County Agents in the twelve specific areas of the Educational Process.

The coefficient of rank correlation between the expressed training needs of Kansas County Agents and undergraduate major was .858. This was a high consensus of the expressed training needs between the undergraduate major groups. The hypothesis was rejected.

Hypothesis 3: There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and degree held.

Both of the degree held groups ranked highest the same two specific areas among the twelve specific areas. The two specific areas in which they felt they needed the most training were "understanding how to motivate people," and "knowledge of the principles and procedures of teaching adults."

Kansas County Agents with Master's degree needed slightly less training in the Educational Process than Kansas County Agents with Bachelor's degree only. All

Kansas County Agents received training in the Educational Process through induction training but 64 per cent of the Master's degree groups majored in Education while only about 30 per cent of the Bachelor's degree group majored in Education. This indicates that even with such a high degree of training the Master's degree group still felt a need for more training in the Educational Process and since the Bachelor's degree group had been trained in the Educational Process through induction training they felt a need to be competent in it. Degree held has no influence on the expressed training needs of Kansas County Agents in the specific areas of the Educational Process.

Regardless of degree held by Kansas County Agents training is the same in the twelve specific areas of the Educational Process as illustrated by a very high agreement in their expressed training needs.

The coefficient of rank correlation between the expressed training needs of Kansas County Agents and degree held was .923. This agreement was very high. The hypothesis was rejected.

Hypothesis 4: There is no association between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and role perception.

Both of the role perception groups ranked highest the same two specific areas among the twelve specific areas.

The two specific areas in which they felt they needed the most training were "understanding how to motivate people" and "how to develop and use teaching methods."

Role perception had no influence on the expressed training needs of the Kansas County Agents in the specific areas of the Educational Process. The high percentage of the Non-Educational role group which felt the need for training in the Educational Process was an indication that they have received training in the Educational Process through induction training at least. Had there been no training received in the Educational Process through induction training and inservice training the percentage of the Non-Educational role group which expressed a need for training in the Educational Process would have been low.

Irrespective of role perception Kansas County Agents can be given general training in the specific areas of the Educational Process. The expressed training needs of Kansas County Agents by role perception is closely associated.

The coefficient of rank correlation between the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and role perception was .827. This was a high consensus in the expressed training needs between the role perception groups. The hypothesis was rejected.

### Recommendations

Based upon the findings of this study the author recommends the following concerning the training of Kansas County Agents:

1. The inservice training program of the Kansas Extension Service should put more emphasis on training County Agents in the Educational Process. Training for all Kansas County Agents should include (a) understanding how to motivate people, (b) knowledge of the principles and procedures of teaching adults and (c) how to develop and use teaching methods.
2. All Kansas County Agents should receive the same general training in the Educational Process. Individual differences should be met by seminars, workshops and conferences.
3. Kansas County Agents with no training in Education should be made aware of their educational role through induction training.
4. Since County Agents tend to indicate they need training only in areas familiar to them, training should not be based entirely on expressed training needs. Expressed training need is only one of the tools for determining training needs.
5. Prospective Kansas County Agents should be

required to take courses in Education, Sociology, Psychology and Philosophy.

6. Agents should receive training in the Educational Process from preservice through graduate training. Preservice training should prepare the prospective County Agent in the fundamental areas of Education, Sociology, Psychology and Philosophy. Induction training should create or revive in the agent an awareness of his educational role. Inservice training should fulfill the immediate need for training in the Educational Process. Graduate training should meet special needs and purpose in the Educational Process. A trainer agent for example, definitely should have graduate training in the Educational Process.
7. One of the major jobs of the District Supervisor should be to identify training needs through personal interviews, analysis of program emphasis, observation, self analysis, performance analysis, etc.
8. Kansas Extension Service Administrators should allocate sufficient funds for a stronger program in the training of Kansas County Agents in the Educational Process and restudy the training

program for Kansas County Agents.

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APPENDIX

PERSONNEL DATA  
Division of Extension  
Kansas State University

91

IBM  
Column  
No. \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

1. 2. 3. \_\_\_\_\_ Schedule Number

4. \_\_\_\_\_ Deck Number

5. Age

1 \_\_\_ Under 26 years

2 \_\_\_ 26 - 35 years

3 \_\_\_ 36 - 45 years

4 \_\_\_ 46 - 55 years

5 \_\_\_ 56 - 65 years

6 \_\_\_ over 65

6. 7. 8. 9. 10. 11. When were you born?

\_\_\_\_\_  
Month      Day      Year

Where were you born?

\_\_\_\_\_  
City                      State

12. Sex

1 \_\_\_ male

2 \_\_\_ female

13. Married

1 \_\_\_ yes

2 \_\_\_ no

14. Please check present rank at Kansas State University? (write in date each acquired)

1 \_\_\_ Professor \_\_\_\_\_

5 \_\_\_ Assistant Instructor \_\_\_\_\_

2 \_\_\_ Associate Professor \_\_\_\_\_

6 \_\_\_ Graduate Assistant \_\_\_\_\_

3 \_\_\_ Assistant Professor \_\_\_\_\_

7 \_\_\_ Resident Assistant \_\_\_\_\_

4 \_\_\_ Instructor \_\_\_\_\_

8 \_\_\_ Other (specify) \_\_\_\_\_

15. What is your title as stated in your current appointment?

- 1  County Agricultural Agent
- 2  Associate or Assistant County Agricultural Agent
- 3  County Home Economics Agent
- 4  Associate or Assistant County Home Economics Agent
- 5  Club Agent
- 6  Associate or Assistant Club Agent
- 7  Specialist
- 8  District Agent
- 9  Administrator
- 10  Other (specify) \_\_\_\_\_

16. 17. 18. What date did you enter  
 19. 20. 21. Extension the first time?

\_\_\_\_\_

Month            Day            Year

22. How many total years of experience have you had in Extension as of July 1, 1962?

- 1  Less than one year
- 2  1 - 5 years
- 3  6 - 10 years
- 4  11 - 15 years
- 5  16 - 20 years
- 6  21 - 25 years
- 7  20 - 30 years
- 8  over 30 years

23. What area do you serve?

- 1  County
- 2  District
- 3  Area
- 4  State

24. Where do you headquarter or where is your office located?

- 1  In the county    2  Out in the district    3  At State Office in Manhattan



29. What was your grade average for your last four semesters of undergraduate work?

1  A

2  B+

3  B

4  C+

5  C

6  D+

7  D

94

30. Number of semester hours of graduate work completed?

0  None

1  1 - 6

2  7 - 12

3  13 - 18

4  19 - 24

5  24 - 30

6  Over 30

31. Do you have an advanced degree program in progress at the present time?

1  yes

2  no

If yes, specify whether Master's or Ph. D. \_\_\_\_\_

Number of hours toward the degree? \_\_\_\_\_

Name of school in which you are enrolled? \_\_\_\_\_

32. If you hold an advanced degree, what was your field of specialization in work for the highest degree you hold?

1  Education

2  Agriculture or home economics education or Extension education

3  Administration (public, education or Extension)

4  Biological Sciences

5  Social Sciences

6  Home Economics

7  Other (specify) \_\_\_\_\_

2 \_\_ Other (specify)

34. 35. 36. When did you receive your advanced degree? (the highest degree you now hold)  
37. 38. 39.

\_\_\_\_\_  
Month          Day          Year

40. Have you ever used sabbatical leave?

1 \_\_ yes

2 \_\_ no

If yes, when? \_\_\_\_\_

41. Which of the following years did you attend Regional Extension School?

School      Courses Taken      Credits      Grade      Type of Financial Assistance

1 \_\_ 1958

2 \_\_ 1959

3 \_\_ 1960

4 \_\_ 1961

5 \_\_ 1962

42. Scholarships you have received?    Date Received?

1 \_\_ Horace Moses \_\_\_\_\_

2 \_\_ Farm Foundation \_\_\_\_\_

3 \_\_ Sears Foundation \_\_\_\_\_

4 \_\_ Kansas State University Subsistance Grant \_\_\_\_\_

5 \_\_ Other (specify) \_\_\_\_\_

43. Fellowships you have received? (write date received after fellowship checked)

1 \_\_ Frysinger \_\_\_\_\_

6 \_\_ Ford Foundation \_\_\_\_\_

2 \_\_ Pfizer \_\_\_\_\_

7 \_\_ Kellogg Foundation \_\_\_\_\_

3 \_\_ Hall \_\_\_\_\_

8 \_\_ Farm Foundation \_\_\_\_\_

4 \_\_ Tyson \_\_\_\_\_

9 \_\_ Other (specify) \_\_\_\_\_

5 \_\_ USS \_\_\_\_\_

44. Have you completed the five weeks Induction Training Program inaugurated at Kansas State University in July 1958?

1  yes

96

2  no

If yes, date of completion \_\_\_\_\_

45. How many years did you live on a farm after age 10 and previous to entering Extension work? (Include years in college if you returned to farm during the summer)

1  None

2  1 - 6

3  7 - 12

4  13 - 18

5  19 - 24

6  Over 24

46. How many years were you a 4-H Club member?

1  None

2  1 - 3

3  4 - 6

4  7 - 9

5  Over 9

47. Membership in an organization

1  Lions

2  Kiwanis

3  Rotary

4  Altrusa

5  Optomist

6  Chamber of Commerce

7  Business & Professional Women's Club

8  Other (specify) \_\_\_\_\_

48. Membership in Learned Societies

1  yes

If yes list

2  no

\_\_\_\_\_  
\_\_\_\_\_

49. If a county worker, in which district do you work?

97

1 \_\_\_ Northeast

2 \_\_\_ Southeast

3 \_\_\_ Central

4 \_\_\_ Northwest

5 \_\_\_ Southwest

50. FOR COUNTY WORKERS ONLY

Role perception by the agent himself (check the one which you feel most nearly describes your job)

1 \_\_\_ A professional agriculturist, home economist or youth worker available to provide information for the people of your county.

2 \_\_\_ A professional agriculturist, home economist or youth worker providing service to the people of your county.

3 \_\_\_ A professional educator developing educational programs with people to effect behavior changes in the people of your county.

4 \_\_\_ A professional educator developing programs to help people help themselves.

5 \_\_\_ A professional organizer of educational activities for the people of your county.

### General Instructions

1. Please respond to ALL items listed in the questionnaire. Do not give any attention to the deck or column numbers.
2. The questionnaires are numbered for research control purposes only.
3. No names of any of the respondents will appear in thesis form nor in any material published as a result of this study.
4. On every page you will find a list of items, please check only one column at right for each item. The checking should be based on your feeling of the importance, and need of those items to you.
5. Your responses to all questions in this questionnaire should be made in terms of your most sincere feelings and beliefs.
6. Please do not feel that there is a certain way that you are expected to answer.
7. The data collected in this study will be analyzed and the information obtained will be made available to the staff of the Kansas Extension Service to be used in further development of its graduate and in-service training program.
8. Considering your present job, please indicate in the column at the right, the amount of training you feel you need in each of these areas.

EXTENSION ORGANIZATION AND ADMINISTRATION

NOT APPLICABLE TO MY JOB  
 NEED VERY MUCH TRAINING  
 NEED MUCH TRAINING  
 NEED SOME TRAINING  
 FEEL I UNDERSTAND

Deck 1  
col.

(Check (✓) only one column at right for each item)

1. Understanding Extension History.						51
2. Understanding Extension philosophy.						52
3. Understanding how the Kansas Extension Service is organized.						53
4. Understanding how policies are formulated in the Kansas Extension Service.						54
5. Knowledge of the existing policies in the Kansas Extension Service.						55
6. Knowledge of professional improvement opportunities.						56
7. Understanding functions and responsibilities of extension workers at the county level.						57
8. Understanding functions and responsibilities of extension workers at the district level.						58
9. Understanding the functions and responsibilities of the specialist staff.						59
10. Knowledge of the organization and functions of the Extension Service at the Federal level.						60
11. Understanding principles and procedures in office management.						61
12. Understanding the recruitment procedures in the Extension Service in my state.						62
13. Understanding Extension policies and procedures on promotion and salary adjustment.						63
14. Understanding retirement and insurance policies and procedures.						64
15. Knowledge of qualifications for extension personnel at all levels in the Extension Service.						65

When I take my next leave of absence for advanced study from the Extension Service I would like to include: \_\_\_\_\_ None of the above areas in my graduate study program.  
 Number(s) \_\_\_\_\_ of the above areas in my graduate program.  
 (no more than 3 total) (66-71)

I would recommend for next year's in-service training program in my district that there be included:  
 \_\_\_\_\_ None of the above areas. Number(s) \_\_\_\_\_ of the above areas.  
 (No more than 3 total) (72-77)

PROGRAM PLANNING AND DEVELOPMENT

(Check (✓) only one column at right for each item.)

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND	100
1. How to analyze the situation in my county.						51
2. How to organize effective program planning committees.						52
3. Understanding the proper role I should assume with program planning committees.						53
4. How to involve "lay" people in program development.						54
5. How to develop people's understanding of the county situation. (Program committee members and others)						55
6. How to identify problems in the county situation and determine the priority of problems.						56
7. Understanding the implications of the rapidly changing population trends in my county.						57
8. How to develop a long-time Extension program plan.						58
9. How to determine objectives of the county program.						59
10. How to build an integrated county program.						60
11. How to relate the annual plan of work to the long-time Extension program plan.						61
12. How to "build in" evaluation procedures into program plans.						62
13. How to use specialists in program development.						63

Deck 2  
col

When I take my next leave of absence for advanced study from the Extension Service I would like to include:

None of the above areas in my graduate study program.  
Number (s) \_\_\_\_\_ of the above areas in my graduate program.  
(No more than 3 total) (64-69)

I would recommend for next year's in-service training program in my district that there be included:

None of the above areas.  
Number (s) \_\_\_\_\_ of the above areas.  
(No more than 3 total) (70-75)

UNDERSTANDING SOCIAL SYSTEMS

(Check (✓) only one column at right for each item)

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND	101
1. Understanding the community organization in my county.						51
2. Understanding the patterns of interdependence of the various groups in my county.						52
3. Understanding the role of the "informal" leader in the acceptance of new practices.						53
4. Knowledge of how to identify leadership in my county.						54
5. Understanding the effect of changing social values on family life in my county.						55
6. Understanding why people join groups and organizations.						56
7. Understanding the functions of farm organization in rural life.						57
8. Understanding the interactions of individuals in groups.						58
9. Understanding the purposes of the various public agencies in my county and their relation to the Extension Service.						59
10. Understanding the relation of social systems (the family, the community, organizations and groups) to communications.						60

Deck 3

Col

When I take my next leave of absence for advanced study from the Extension Service I would like to include:

None of the above areas in my graduate study program.  
Number (s) \_\_\_\_\_ of the above areas in my graduate program.  
(No more than 3 total) (61-66)

I would recommend for next year's in-service training program in my district that there be included:

None of the above areas.  
Number (s) \_\_\_\_\_ of the above areas.  
(No more than 3 total) (67-72)

HUMAN DEVELOPMENT

(Check  only one column at right for each item)

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND
1. Understanding the developmental process of boys and girls				102	
2. How to develop my own leadership abilities.					
3. Understanding the basic psychological drives of people, such as the need for recognition and need for security.					
4. Understanding the factors affecting the behavior of people.					
5. Knowledge of the attitudes and values held by people.					
6. Understanding why people have certain goals in life.					
7. Understanding the reasons for aggressive behavior.					
8. Knowledge of the principles and techniques in effective counseling.					
9. How to develop an approach to Extension work that considers the feelings and values of the people served by the program.					
10. Understanding the factors affecting personality development in rural people.					

Deck 4

Col

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When I take my next leave of absence for advanced study from the Extension Service I would like to include:

None of the above areas in my graduate study program.  
 Number (s) \_\_\_\_\_ of the above areas in my graduate program.  
 (No more than 3 total) (61-66)

I would recommend for next year's in-service training program in my district that there be included:

None of the above areas.  
 Number (s) \_\_\_\_\_ of the above areas.  
 (No more than 3 total) (67-72)

THE EDUCATIONAL PROCESS

(Check  only one column at right for each item)

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND	103
1. Understanding how people learn.						
2. Understanding the effect of the differences in individuals on the teaching-learning process.						
3. Understanding the relation of experience to learning.						
4. Understanding the relation of learning to what we perceive (see, feel and hear) through our senses.						
5. Understanding the relationship between the need for and usefulness of subject matter information to learning.						
6. Understanding the relation of interest to learning.						
7. Knowledge of the principles and procedures in teaching adults.						
8. How to develop and use teaching methods.						
9. Knowledge of the background and history of education.						
10. Understanding the psychological theories of learning.						
11. Understanding the philosophies of education.						
12. Understanding how to motivate people						
	1	2	3	4	5	

Deck 5

COL

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When I take my next leave of absence for advanced study from the Extension Service I would like to include:

None of the above areas in my graduate program.  
Number (s) \_\_\_\_\_ of the above areas in my graduate program.  
(No more than 3 total) (63-68)

I would recommend for next year's in-service training program in my district that there be included:

None of the above areas.  
Number (s) \_\_\_\_\_ of the above areas.  
(No more than 3 total) (69-74)

COMMUNICATION

(Check (✓) only one column at right for each item)

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND
1. Understanding the basic principles of communication.					104
2. Understanding the relationship between group processes and communication.					
3. How to make my public speaking more effective.					
4. How to develop and use exhibits effectively.					
5. How to write effective personal letters.					
6. How to write effective reports.					
7. How to write effective news articles.					
8. How to use radio effectively and efficiently.					
9. How to use television effectively and efficiently.					
10. How to use visual aids in teaching.					
11. How to use news letters effectively and efficiently.					
12. How to use photographs effectively in Extension communication.					
13. How to use circular letters effectively.					
14. How to conduct effective farm and home visits.					
15. Knowledge of the techniques in making office calls efficient and effective.					

Deck 6  
Col.

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When I take my next leave of absence for advanced study from the Extension Service I would like to include:

None of the above areas in my graduate study program.  
Number (s) \_\_\_\_\_ of the above areas in my graduate program.  
(No more than 3 total) (66-71)

I would recommend for next year's in-service training program in my district that there be included:

None of the above areas.  
Number (s) \_\_\_\_\_ of the above areas.  
(No more than 3 total) (72-77)

(Check (✓) only one column at right for each item)

105

MALE PERSONNEL ONLY CHECK THIS PAGE

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND	
1. Animal Science.						51
2. Dairy Science.						52
3. Agronomy (include crops, soils, fertilizers)						53
4. Agricultural Marketing. (include livestock, grain, dairy and poultry)						54
5. Farm Management.						55
6. Dairy Technology.						56
7. Agricultural Engineering. (include machinery, buildings and drainage)						57
8. Entomology.						58
9. Horticulture. (include pomology and vegetable crops)						59
10. Soil Conservation.						60
11. Poultry.						61
12. Agricultural Credit.						62
13. Consumer Marketing. (Market information for consumers)						63
14. Floriculture.						64
15. Plant Pathology.						65
	1	2	3	4	5	

Deck 7

Col.

When I take my next leave of absence for advanced study from the Extension Service I would like to include:

None of the above areas in my graduate training program.  
 Number (s) \_\_\_\_\_ of the above areas in my graduate program.  
 (No more than 3 total) (66-71)

I would recommend for next year's in-service training program in my district that there be included:

None of the above areas.  
 Number (s) \_\_\_\_\_ of the above areas  
 (No more than 3 total) (72-77)

TECHNICAL KNOWLEDGE

(Check (X) only one column at right for each item)

FEMALE PERSONNEL ONLY CHECK THIS PAGE

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND	106
1. Clothing Economics.						51
2. Clothing Construction.						52
3. New Developments in Textiles.						53
4. Dress Design.						54
5. Basic nutritional principles.						55
6. Family Relations.						56
7. Child Nutrition.						57
8. Family Economics.						58
9. Home Management.						59
10. Child Development.						60
11. Consumer Marketing (marketing information for consumers)						61
12. Home Furnishings.						62
13. Household Equipment.						63
14. Interior Design.						64
15. Housing.						65

Deck 8

Col

When I take my next leave of absence for advanced study from the Extension Service I would like to include:

None of the above areas in my graduate training program.  
Number(s) \_\_\_\_\_ of the above areas in my graduate program.  
(No more than 3 total) (66-71)

I would recommend for next year's in-service training program in my district that there be included:

None of the above areas.  
Number(s) \_\_\_\_\_ of the above areas.  
(No more than 3 total) (72-77)

EFFECTIVE THINKING

(Check (✓) only one column at right for each item)

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND	107
1. Understanding the processes of logical reasoning.						51
2. Understanding the relation of language (terms used) to the thinking process.						52
3. Understanding the relationship of day-dreaming to creative thinking.						53
4. Understanding the relationship of the "problem solving" method to effective thinking.						54
5. Understanding the effect of prejudice on the thinking process.						55
6. Understanding the effect of pressure groups on the the thinking process.						56
7. Knowledge of techniques for developing effective thinking in Extension groups.						57
8. Knowledge of the principles of creative thinking.						58
9. How to use the problem solving approach in Extension work.						59
10. Understanding the role of the Extension workers in predicting probable future results from existing facts.						60
	1	2	3	4	5	

Deck 9  
Col.

When I take my next leave of absence for advanced study from the Extension Service I would like to include:

None of the above areas in my graduate training program.  
Number (s) \_\_\_\_\_ of the above areas in my graduate program.  
(No more than 3 total) (61-66)

I would recommend for next year's in-service training program in my district that there be included:

None of the above areas.  
Number (s) \_\_\_\_\_ of the above areas.  
(No more than 3 total) (67-72)

RESEARCH

(Check  only one column at right for each item)

	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND	108
1. Knowledge of the methods for measuring results of programs.						51
2. How to use the experimental approach (pilot projects) in extension work.						52
3. How to interpret the results of research in the physical sciences.						53
4. How to interpret the results of research in the social sciences.						54
5. Understanding research terminology.						55
6. Making application of research findings in assisting people in my county.						56
7. Understanding ways of designing evaluation projects.						57
8. Understanding how to interpret statistical results.						58
9. How to develop simple survey devices.						59
10. Understanding the role of investigation in solving problems with people.						60
11. Knowledge of where to secure sound research information other than from experiment stations.						61
12. How to make the best use of research publications.						62

Dec 10  
col.

When I take my next leave of absence for advanced study from the Extension Service I would like to include:

         None of the above areas in my graduate study program.  
Number (s)                                  of the above areas in my graduate program.  
(No more than 3 total) (63- 68)

I would recommend for next year's in-service training program in my district that there be included:

         None of the above areas.  
Number (s)                                  of the above areas.  
(No more than 3 total) (69- 74)

On the preceding pages you have had an opportunity to indicate your feeling of need for training in a large number of areas. Perhaps there are some additional areas that were not listed in which you feel a need for training. If this is the case, please indicate the area or areas below by writing them in the appropriate space and checking at the right the degree of training you feel that you need.

If you do not feel the need for training in additional areas, write NONE in the space below.

Deck 10  
col.  
(75-78)

Additional Area(s) of Training	Very Much Training Needed	Much Training Needed	Some Training Needed

Below is a suggested list of categories in which it might be desirable for county Extension agents to be trained. Please check these nine categories on the scale at the right below based on your feeling of the importance of these areas in contributing to the effectiveness of a county Extension agent.

Category	4 Absolutely Essential	3 Highly Desirable	2 Would be Helpful	1 Not Important
<u>Extension Organization and Administration.</u>				
<u>Human Development.</u> i.e., developmental processes of people, group interaction principles.				
<u>The Educational Process:</u> principles of learning; teaching methods and philosophy of education				
<u>Social Systems:</u> family, community, school, church groups, special interest groups, farm organizations.				
<u>Program Planning and Development.</u>				
<u>Communication:</u> basic communication, individual, group and mass media.				
<u>Effective Thinking:</u> problem solving method; decision making based on critical analysis; and creativity.				
<u>Technical Knowledge:</u> subject matter in agriculture and home economics.				
<u>Research:</u> principles of research and evaluation; methods of utilizing research findings.				

Deck 11  
Col.

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Listed below is the same list of categories you have just classified as to their importance in contributing to the effectiveness of a county Extension agent.

Please indicate by checking the scale below the amount of training you feel you need in each of these nine areas.

Category	NOT APPLICABLE TO MY JOB	NEED VERY MUCH TRAINING	NEED MUCH TRAINING	NEED SOME TRAINING	FEEL I UNDERSTAND	Deck 11 Col.
<u>Extension Organization and Administration</u>						60
<u>Human Development:</u> i.e., developmental processes of people, group interaction principles.						61
<u>The Educational Process:</u> principles of learning; teaching methods and philosophy of education.						62
<u>Social Systems:</u> family, community, school, church groups, special interest groups, farm organizations						63
<u>Program Planning and Development</u>						64
<u>Communication:</u> basic communication, individual, group and mass media.						65
<u>Effective Thinking:</u> problem solving methods, decision making based on critical analysis, creativity.						66
<u>Technical Knowledge:</u> subject matter in agriculture and home economic.						67
<u>Research:</u> principles of research and evaluation; methods of utilizing research findings.						68
	1	2	3	4	5	

Please check back through the entire questionnaire to be sure that all items are checked - Thank you!

A COMPARATIVE ANALYSIS OF THE EXPRESSED  
TRAINING NEEDS OF KANSAS COUNTY AGENTS  
IN THE AREA OF THE EDUCATIONAL PROCESS

by

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AN ABSTRACT OF A MASTER'S THESIS

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The purpose of this study was to determine and compare the expressed training needs of the Kansas County Agents in twelve specific areas of the Educational Process.

The objectives of this study were (1) to determine the training needs of the Kansas County Agents according to their expressed training needs in the specific areas of the Educational Process, (2) to identify some of the personal and situational factors which are associated with the expressed training needs of Kansas County Agents in the specific areas of the Educational Process and (3) to determine how the three Kansas County Agent position groups agree in their expressed training needs in the specific areas of the Educational Process.

Null hypotheses were used as a guide to direct the study. The hypotheses were developed from the objectives and review of literature.

The data were collected by means of a mailed questionnaire which was pretested. The total universe of the Kansas County Agents was used. Descriptive statistical techniques were used to analyze the data. The hypotheses were accepted or rejected according to the result of the data by using percentage distribution, rank order, coefficient of rank correlation and coefficient of concordance in the analysis.

The National Task Force on Inservice Training recom-

mended nine areas in which all County Agents should have a degree of competency. One of the competency areas was the Educational Process.

The basic elements of this study were the twelve specific areas within the Educational Process which were identified by McCormick of Ohio with the assistance of the members of the National Task Force on Cooperative Extension Inservice Training.

Some of the important findings of this study were:

1. Kansas County Agents agreed they needed the greatest amount of training in the following three specific areas of the Educational Process: (a) Understanding how to motivate people, (b) Knowledge of the principles and procedures of teaching adults, and (c) How to develop and use teaching methods.

2. Kansas County Agents agreed they needed the least training in the following three specific areas: (a) Relation of learning to what we perceive, (b) Relation of experience to learning, and (c) Knowledge of the background and history of education.

3. Of the three position groups (Agricultural Agents, Home Economics Agents and 4-H Club Agents), the 4-H Club Agents expressed the greatest need in area of the Educational Process.

4. Of the two undergraduate major groups, the

Technical Subject Matter group expressed the greatest need for training in the Educational Process.

5. County Agents holding Bachelor's degrees expressed more need for training in the Educational Process than those holding Master's degrees.

6. County Agents who saw their role as non-educational expressed a greater need for training in the Educational Process than those who saw their role as educational.

#### Recommendations

Based upon the findings of this study the following recommendations were made:

1. Training for all County Agents should include: (a) Understanding how to motivate people, (b) Knowledge of the principles and procedures of teaching adults, and (c) How to develop and use teaching methods.

2. Seminars, workshops and conferences should be set up to meet individual needs of Kansas County Agents in the specific areas of the Educational Process.

3. Prospective County Agents should be required to take courses in Education, Sociology, Psychology and Philosophy.







