training needs in
1890 institutions*

Henry M. Brooks

What are the training needs of Extension specialists? It’s evident from the amount of literature available that this question still hasn’t been examined thoroughly.

A review of the literature shows that a considerable amount of research has been done on the training needs of county Extension personnel. After McCormick studied the training needs of Ohio Extension agents in 1959, he recommended further research be done to analyze the training needs of Extension specialists.¹ Solovitsky also had the same concern in 1971 when he studied the training needs of urban Extension agents working with disadvantaged audiences.²

Extension specialists are usually employed on the basis of their formal academic training, which generally includes a doctorate degree in their area of specialization. Hyatt reports that state subject-matter specialists need a doctorate in their area of specialization when they join the staff, or receive it shortly afterwards. He also says it’s doubtful that any one person upon entry into the Extension Service will embody all necessary competencies. This presents a challenge to those in staff training and development to develop effective in-service and graduate programs that will provide further skill and competence for staff members in areas most needed for their jobs.³

In a study done as part of my graduate program at Ohio State University, I identified and described the training needs of Extension specialists at 1890 land-grant institutions and Tuskegee Institute. I also described the training needs of specialists as identified by their administrator, such as the assistant director, assistant dean, and Extension coordinator. The training needs were described as they related to the following areas:

*An 1890 institution is the black land-grant institution established by a Congressional Act in 1890. The Tuskegee Institute is not an 1890 institution, but is included in this study.

Henry M. Brooks: Community Resource Development Specialist, Kentucky Cooperative Extension Service, Kentucky State University—Frankfort. Received for publication: October, 1975.
1. Extension philosophy, organization, and internal procedures.
2. Methods and procedures essential to planning Extension programs.
3. Methods and procedures essential to implementing Extension programs.
4. Methods and procedures essential to evaluating and reporting Extension programs.
5. Relationships with the total university and other agencies.

... Although an expressed need exists for training in other areas, emphasis in evaluating Extension programs should be a major concern for those responsible for staff training and development.

Since this study was concerned with describing the training needs of Extension specialists at 1890 institutions and Tuskegee and most of these institutions had limited staffs, a census of all state-level specialists was used as respondents. Fourteen states that conduct Extension programs from predominantly black land-grant institutions and Tuskegee were used. The 14 states included Alabama, Arkansas, Florida, Georgia, Kentucky, Maryland, Louisiana, Mississippi, Missouri, North Carolina, Tennessee, Texas, Virginia, and Oklahoma. Delaware and South Carolina—which conduct Extension programs from predominantly black land-grant institutions—weren’t included in this study because they didn’t have a specialist staff. It was learned after this study was completed that the Extension Service at one predominantly black land-grant institution in South Carolina did have Extension personnel with statewide responsibilities, but weren’t referred to as state specialists.

The population for this study included 100 Extension specialists and 15 Extension administrators.

The data for this study were collected by mail questionnaires from January 15 to February 25, 1975.

A total of 104 questionnaires was returned—a 90.4% response. Nine completed questionnaires from specialists weren’t included in the analysis of data because they didn’t meet the study’s basic requirements. The 95 respondents whose questionnaires were used represented 82.6% of the potential respondents and 91.3% of the actual responses. The 95 respondents included 14 administrators and 81 specialists.

**Findings**

Several selected characteristics of specialists were analyzed to determine if they were related to specialists’ perceived training needs. Here are some of the findings:
Fifty-seven or 71.3% of the specialists at 1890 institutions and Tuskegee had between 1-5 years tenure in Extension. Twenty-two or 27% of the specialists had 6 or more years tenure in Extension. Two specialists didn’t respond to this item.

Twenty or 25% of the specialists had been in their present position for 1 year. Twenty-four or 30% had been in their present position for 2 years. Thirty-three or 41.4% had been in their present position for 3 years. Four or 3.6% didn’t indicate their tenure in their position or indicated it incorrectly.

Twelve or 14.8% of the specialists had bachelor’s degrees. Fifty-nine or 72.8% had master’s degrees. Ten or 12.4% of the specialists had doctoral degrees.

Forty-two or 51.9% of subject-matter specialists’ highest academic degree was in education. Educational pre-service training included agricultural education, home economics education, adult education, Extension education, and general education. Seventeen or 21% of the specialists’ highest academic degree was in home economics. Home economics included pre-service training in nutrition, home management, clothing, child development, and family life. Ten or 12.3% of the specialists had pre-service training in production agriculture. The remaining respondents, 14.8%, didn’t have pre-service training in areas directly related to home economics or agriculture.

Twenty-two or 28.2% of the subject-matter specialists were between 26-30 years old. Ten or 12.2% of the specialists were between 36-40 years of age. Forty-six or 52.6% of the specialists were about evenly distributed between 21 and 60 years old. Two specialists were over 60 years. One person didn’t list age.

Fifty-one or 63% of the subject-matter specialists were males. Thirty or 37% of the specialists were females.

Thirty or 37% of the subject-matter specialists had major responsibilities in home economics. Thirty-two or 39.6% of the specialists were evenly divided between agricultural and community resource development. Specialists with major responsibilities in 4-H constituted 17.3% of the specialists. The other respondents listed their responsibilities in divisions other than the four primary Extension areas.

Table 1 characterizes the “typical” Extension specialist and administrator at 1890 institutions and Tuskegee.

Training-need items were analyzed both independently and as groups of items related to specific areas of training.
Table 1. Composite of "typical" specialist and administrator.

<table>
<thead>
<tr>
<th></th>
<th>Specialist</th>
<th>Administrator</th>
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<tbody>
<tr>
<td>Age</td>
<td>26-30</td>
<td>40-65</td>
</tr>
<tr>
<td>Sex</td>
<td>male</td>
<td>male</td>
</tr>
<tr>
<td>Tenure in Extension</td>
<td>1-5 years</td>
<td>1-5 years</td>
</tr>
<tr>
<td>Tenure in present position</td>
<td>3 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Level of formal education</td>
<td>master's</td>
<td>doctoral</td>
</tr>
<tr>
<td></td>
<td>degree</td>
<td>degree</td>
</tr>
<tr>
<td>Pre-service training</td>
<td>education</td>
<td>education</td>
</tr>
</tbody>
</table>

Items were rated on a six-point scale. According to the way the items were rated, the higher the score, the more training needed.

In general, specialists rated items relating to training needed in evaluating and reporting Extension programs higher than items relating to other areas of training. The items that specialists rated highest were:

1. How to write effective reports to promote non-traditional programs.
2. How to build evaluation procedures into program plans for low-income audiences.
3. Knowledge of criteria in evaluating results in Extension.

Specialists rated items relating to Extension philosophy lower than other areas of training. The following are the items specialists rated lowest:

1. Understanding Extension history.
2. Understanding how the Extension Service is organized.
3. Understanding Extension Service, its objectives, organization, and relationship to the land-grant institution.

When items were analyzed according to specific areas of training needed, the total mean score of all items relating to evaluating and reporting Extension programs was higher than the total mean score of any other specific area (see Table 2). Items relating to Extension philosophy had the lowest mean score.

Specialists in different Extension divisions perceived that the type of technical training needed most was in areas other than their own specialty. Community development specialists needed most training in "vegetable growing," 4-H specialists in "food and nutrition," agricultural specialists in "family economics," and home economics specialists in "health education."
Table 2: Specific areas of training needed

<table>
<thead>
<tr>
<th>Areas</th>
<th>Mean* scores</th>
<th>Standard deviation</th>
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<tbody>
<tr>
<td>Methods and procedures essential to evaluating and reporting Extension programs.</td>
<td>2.77</td>
<td>1.00</td>
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<tr>
<td>Methods and procedures essential to implementing Extension programs</td>
<td>2.62</td>
<td>1.07</td>
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<td>Methods and procedures essential to planning Extension programs</td>
<td>2.58</td>
<td>1.13</td>
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<td>Relationships with the total university and other agencies</td>
<td>2.52</td>
<td>0.91</td>
</tr>
<tr>
<td>Extension philosophy, organization, and internal procedures</td>
<td>2.22</td>
<td>1.02</td>
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</table>

*Mean range 0-5.

Recommendations

1. Each 1890 land-grant institution should have a designated person responsible for staff training and development.
2. State and/or regional specialist training meetings should be conducted by the original land-grant institutions (established in 1862) and ES-USDA with emphasis on evaluating and reporting Extension programs.
3. The training needs of specialists at 1862 institutions should be analyzed to determine if their needs for training are similar to specialists at 1890 institutions.
4. Specialists at 1890 institutions should be encouraged to participate in area and county planning meetings to get a better understanding of the total program development process.
5. Specialists at 1890 institutions should be encouraged by Extension administrators to continue their formal education and to participate in national Extension workshops and seminars.
6. Specialists at 1890 institutions should be encouraged to participate in training sessions in areas other than their specialization.

It's clear from this study's findings that specialists at 1890 land-grant institutions feel that their greatest need for training is in the area of evaluating and reporting Extension programs...

Conclusion

It's clear from this study's findings that specialists at 1890 land-grant institutions feel that their greatest need for training is in the area of evaluating and reporting Extension...
programs. Although an expressed need exists for training in other areas, emphasis in evaluating Extension programs should be a major concern for those responsible for staff training and development.

Footnotes


4. This is a modified version of the areas of competency recommended by the ECOP Subcommittee on Staff Training and Development as important to all Extension professionals. National Policy Statement on Staff Training and Development (Madison: University of Wisconsin, 1968).