

PERCEPTIONS OF THE VALUE OF ADULT/YOUNG FARMER
EDUCATION COMPETENCIES NEEDED BY
VOCATIONAL AGRICULTURE TEACHERS

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The identification of competencies needed to successfully teach vocational agriculture has concerned individuals who plan and administer the program in secondary schools for some time. Recent competency studies have been conducted in several states to determine those educational experiences most appropriate for vocational agriculture programs (Garner, 1974; Matteson, BJORAKER and Jensen, 1974; Moore and Bender, 1975; Herring, 1976; Cheek, Beeman and Adams, 1977; and Lighari, 1979).

However, recent research was not found which ascertained the needed professional educational competencies of vocational agriculture teachers as viewed by local school administrators. This lack of information about the attitudes of administrators concerning competencies needed by vocational agriculture teachers became the focal point for this investigation. This article is limited to the portion of the investigation related to educational competencies needed by vocational agriculture instructors in the area of adult/young farmer education.

Purpose

The purpose of the study addressed by this article was to verify the professional education competencies relating to adult/young farmer education needed by teachers of vocational agriculture as perceived by secondary school administrators, vocational agriculture teachers, teacher educators and state supervisors.

Methodology

The study was ex post facto in nature. The independent variable was position, with six levels of the variable being principals, vocational-technical school directors, superin-

tendents, teachers, teacher educators and state supervisors. The dependent variables were the professional education competencies needed by vocational agriculture teachers relating to adult/young farmer education.

All vocational agriculture instructors, vocational-technical school directors, principals and superintendents of secondary public schools with a vocational agriculture program, state supervisors of vocational agriculture and teacher educators of agricultural education in Missouri were used as the population for the study.

The sample included 20 percent of the superintendents and principals, 20 percent of the vocational agriculture instructors, all area vocational-technical school directors administering secondary programs of vocational agriculture, all teacher educators and all state supervisors in Missouri. The response rate for the six groups was 89 percent.

Instrumentation

The 209 competency statements used on the opinionnaire were identified and verified by Lighari (1979). The instrument was organized into 14 categories, one of which was adult/young farmer education, with 17 competency statements. Numerical values were assigned for all possible responses on a six-point Likert-type scale. Cronbach's alpha revealed a reliability coefficient for the adult/young farmer education competency category of .96.

Data Analysis

The importance of the competencies studied were determined using ranks, means and standard deviations. Means were calculated for each competency for the six groups of educators. Items were ranked, using mean scores, for each group separately. In addition, analysis of variance (ANOVA) was calculated to ascertain if significant differences existed among respondents from the six groups.

Findings

The rank, means and standard deviations of the 17 adult/young farmer competencies studied within each group of educators are compared in Table 1. The adult/young farmer education competencies were ranked with 192 other professional education competencies needed by vocational agriculture teachers in Missouri.

Table 1

RANKS, MEANS, AND STANDARD DEVIATIONS OF RATINGS OF THE IMPORTANCE OF
PROFESSIONAL COMPETENCIES PERTAINING TO ADULT/YOUNG FARMER EDUCATION

Competencies	Rank, Means and Standard Deviations by Position					
	Teachers	Principals	Directors	Super-intendents	Teacher Educators	State Supervisors
Utilize specialists in the adult education program.	$\frac{1}{5.05}$ 0.97 **	$\frac{2}{4.74}$ 1.18	$\frac{3T}{5.00}$ 0.80	$\frac{1}{4.59}$ 1.09	$\frac{15T}{4.78}$ 0.44	$\frac{15T}{4.83}$ 0.75
Assist the Young Farmer executive committee to plan and execute an annual program of activities.	$\frac{2}{4.71}$ 0.93	$\frac{15}{4.23}$ 1.23	$\frac{7T}{4.88}$ 0.91	$\frac{6T}{4.28}$ 1.23	$\frac{12T}{5.00}$ 0.71	$\frac{7}{5.50}$ 0.84 **
Utilize teaching methods and techniques especially appropriate for adults.	$\frac{3}{4.68}$ 0.94	$\frac{1}{4.94}$ 0.77	$\frac{3T}{5.00}$ 0.69	$\frac{2}{4.54}$ 1.19	$\frac{3T}{5.33}$ 0.71 **	$\frac{2T}{5.67}$ 0.52 *
Evaluate the effectiveness of an adult/young farmer education program.	$\frac{4}{4.63}$ 1.07	$\frac{10}{4.42}$ 1.15	$\frac{2}{5.04}$ 0.66	$\frac{4}{4.63}$ 1.11	$\frac{14}{4.89}$ 0.60	$\frac{11}{5.33}$ 0.82

Plan an annual program of instruction for adult/young farmers.	$\frac{5}{4.59}$ 1.10	$\frac{7}{4.52}$ 1.15	$\frac{9}{4.81}$ 0.98	$\frac{8}{4.26}$ 1.29	$\frac{3T}{5.33}$ ** 0.71	$\frac{7}{5.50}$ ** 0.55
Conduct on-farm and/or on-the-job instruction for adults.	$\frac{6}{4.58}$ 1.26	$\frac{6}{4.55}$ 1.06	$\frac{12T}{4.62}$ 0.98	$\frac{9T}{4.23}$ 1.20	$\frac{3T}{5.33}$ ** 0.71	$\frac{2T}{5.67}$ * 0.52
Organize and advise a Young Farmer Chapter.	$\frac{7}{4.54}$ 1.01	$\frac{3T}{4.65}$ 1.17	$\frac{1}{5.08}$ ** 0.84	$\frac{6T}{4.28}$ 1.10	$\frac{7T}{5.22}$ ** 0.67	$\frac{1}{5.83}$ * 0.41
Organize an adult education program.	$\frac{8}{4.47}$ 1.22	$\frac{3T}{4.65}$ 1.20	$\frac{7T}{4.88}$ 0.86	$\frac{3}{4.46}$ 1.17	$\frac{1T}{5.44}$ * 0.53	$\frac{2T}{5.67}$ * 0.52
Plan a yearly schedule by months of individualized instruction to meet the needs of the business management students.	$\frac{9}{4.44}$ 1.09	$\frac{8T}{4.48}$ 1.26	$\frac{10T}{4.73}$ 0.78	$\frac{14}{4.13}$ 1.17	$\frac{7T}{5.22}$ ** 0.83	$\frac{14}{5.17}$ 0.98

*In the upper 25 percent of all items.

**In the upper 50 percent of all items.

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Table 1, Continued

Competencies	Rank, Means and Standard Deviations by Position					
	Teachers	Principals	Directors	Superintendents	Teacher Educators	State Supervisors
Utilize the local vocational agriculture advisory committee to develop the adult/young farmer program.	$\frac{10}{4.42}$ 1.16	$\frac{5}{4.58}$ 1.26	$\frac{3T}{5.00}$ 0.85	$\frac{11}{4.21}$ 1.11	$\frac{3T **}{5.33}$ 0.50	$\frac{7 **}{5.50}$ 0.55
Organize deomonstrations, field days and tours for adult/young farmers.	$\frac{11T}{4.37}$ 1.08	$\frac{10}{4.45}$ 1.21	$\frac{12T}{4.62}$ 0.98	$\frac{13}{4.15}$ 1.18	$\frac{15T}{4.78}$ 0.67	$\frac{11}{5.33}$ 0.82
Develop an analysis of individual members' records (Enterprise Analysis, Financial Statement, Profit and Loss Statement) for the business management group.	$\frac{11T}{4.37}$ 1.19	$\frac{13}{4.29}$ 1.16	$\frac{15}{4.58}$ 1.03	$\frac{16T}{3.97}$ 1.44	$\frac{12T}{5.00}$ 1.00	$\frac{11}{5.33}$ 0.82
Organize and conduct meetings for beginning farmers, established farmers and those with specialized interests.	$\frac{13}{4.29}$ 1.10	$\frac{14}{4.26}$ 1.12	$\frac{10T}{4.73}$ 0.87	$\frac{9T}{4.23}$ 1.37	$\frac{10T}{5.11}$ 0.93	$\frac{2T *}{5.67}$ 0.52

Work with each business management group member in developing short, intermediate and long term goals.	$\frac{14}{4.27}$ 1.10	$\frac{16}{4.19}$ 1.11	$\frac{12T}{4.62}$ 1.02	$\frac{12}{4.18}$ 1.34	$\frac{10T}{5.11}$ 0.78	$\frac{15T}{4.83}$ 1.47
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Utilize and follow "Missouri Standards for Adult Education."	$\frac{15T}{4.25}$ 1.25	$\frac{12}{4.32}$ 1.17	$\frac{6}{4.92}$ 0.69	$\frac{5}{4.31}$ 1.17	$\frac{1T *}{5.44}$ 0.73	$\frac{2T *}{5.67}$ 0.52
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Develop monthly visitation, class and office schedules.	$\frac{15T}{4.25}$ 1.28	$\frac{8T}{4.48}$ 1.09	$\frac{16}{4.50}$ 1.14	$\frac{15}{4.03}$ 1.31	$\frac{7T **}{5.22}$ 0.83	$\frac{7 **}{5.50}$ 0.84
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Conduct demonstration plots for adults.	$\frac{17}{3.81}$ 1.47	$\frac{17}{4.16}$ 1.27	$\frac{17}{4.00}$ 1.10	$\frac{16T}{3.97}$ 1.11	$\frac{16}{4.00}$ 0.87	$\frac{15T}{4.33}$ 1.37
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*In the upper 25 percent of all items.

**In the upper 50 percent of all items.

Those adult/young farmer education competencies which were ranked in the upper 25 percent for the group are marked with a single asterisk. A double asterisk identifies those in the upper 50 percent.

The means and standard deviations of the responses for the six groups of educators are compared in Table 2. Of the response groups, state supervisors and teacher educators perceived the adult/young farmer education competencies to be of the highest importance. Directors, teachers and principals placed a lower value on these competencies than did state supervisors and teacher educators. Superintendents placed a lower value on adult/young farmer competencies than the other groups of educators.

Table 2 also presents the number of adult/young farmer education competencies that each respective group of educators placed in the upper 25 and 50 percent of all the professional education competencies that were compared. Generally, few adult/young farmer education items were placed in the upper 25 or 50 percent by any of the groups of educators. State supervisors, though, placed more items of this category in the upper 25 and 50 percent than did the other groups. Teachers, principals, directors and superintendents did not have any competencies in the upper 25 percent and principals and superintendents did not place any items in the upper 50 percent. Furthermore, teachers and directors placed only one competency in the upper 50 percent.

One way analysis of variance was used to analyze the data. An alpha level of .10 was used to determine significance for the study, but to aid in the interpretation of data the .05 alpha level is also reported.

There were significant differences among the means of the groups of educators. The state supervisors had the highest mean score and the superintendent group had the lowest mean score. The superintendents' ratings were significantly lower, at the .10 and .05 levels, than teacher educators and state supervisors and, at the .10 alpha level, their ratings were lower than directors. The mean score of teachers was significantly lower, at the .10 and .05 alpha levels, than those of teacher educators and state supervisors. The perceptions of principals were significantly lower, at the .10 and .05 alpha levels, than state supervisors and lower than teacher educators at the .10 alpha level. The mean ratings of directors was significantly lower than state supervisors at the .10 alpha level.

Table 2

MEANS, STANDARD DEVIATIONS AND RANKS OF ADULT/YOUNG FARMER
COMPETENCY CATEGORIES BY EDUCATIONAL GROUPS

Group	Mean	Standard Deviation	Upper 25 Percent	Upper 50 Percent
State Supervisors	5.37	0.57	6 of 17	16 of 17
Teacher Educators	5.09	0.54	2 of 17	11 of 17
Directors	4.76	0.69	0 of 17	1 of 17
Teachers	4.46	0.82	0 of 17	1 of 17
Principals	4.46	0.98	0 of 17	0 of 17
Superintendents	4.25	1.04	0 of 17	0 of 17

Conclusions and Implications

Teachers, principals, and superintendents placed less emphasis on adult/young farmer education than did teacher educators and state supervisors. Therefore, a difference of opinion exists between the groups of educators as to the appropriate role of adult/young farmer education to be performed by the vocational agriculture teacher.

There is a lack of support for adult/young farmer education in the leadership of the local secondary system. Those vocational agriculture teachers doing an outstanding job and/or desiring to make improvements in adult/young farmer education may lack support from secondary school administrators. The lack of interest by these administrators may thwart an overall state effort to improve adult/young farmer education in Missouri. Beginning teachers are taught to emphasize the area of adult/young farmer education; however, local administrators evaluating them may not expect adult/young farmer education to be a part of the regular programming and may, therefore, not support the teachers' efforts in adult/young farmer education. State supervisors are emphasizing adult/young farmer education when advising vocational agriculture teachers while local school administrators are not emphasizing this educational effort.

The opinions of teachers in general tend to represent the views of local school administrators rather than those of state supervisors and teacher educators. Therefore, it becomes evident that the attitudes of teachers as well as local administrators must be changed if adult/young farmer programming is to be impacted.

References

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