

## FEDERAL FUNDS FOR PROGRAM IMPROVEMENT

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Most agricultural education faculty members desire to engage in meaningful research. Agricultural educators have recognized that knowledge generated through research can contribute to improvements in vocational agriculture. While there have been significant research activities in agricultural education, there have been serious shortcomings. According to Mannebach (1980):

Research has typically been an individual endeavor. Students have been encouraged to study areas of interest to them. Yet in recent years, we have seen the trend and perhaps felt the pressure to become engaged in more programmatic research endeavors.

In a recent review and synthesis of research, Newcomb (1978) concluded that agricultural education lacks the kind of programmatic research necessary for in-depth understanding essential to an emerging discipline. He said that:

...the status of research in agriculture education is not what it ought to be. The gap between what is and what should be must be closed in the immediate future if we are to continue to progress, to live up to our potential, and--most importantly--to serve our clients, the students.

But, how can researchers in agricultural education develop programmatic efforts without sufficient financial support?

The current Federal vocational education legislation (P.L. 94-482) has made funding available for a variety of program improvement activities. Administered at the state level by research coordinating units, over \$39 million was obligated nationwide in the 1978 and 1979 fiscal years for research, innovative and exemplary, and curriculum development projects. A summary of those projects is available and a pattern of funding by state agencies is becoming evident (Budke and Magisos, 1980). This

article describes the extent to which these funds are being used in agricultural education.

University-based agricultural educators may want to assess how this funding pattern might be used to enhance research in agricultural education. One axiom of research grantsmanship is that you must be prepared to "sell what the sponsor is buying," especially if the sponsor is offering contracts (to carry out the sponsor's program) instead of grants (to support what the grantee is doing). Most of the state-administered program improvement projects are, as required by law, under contracts, not grants. The question then becomes one of whether agricultural educators have something to offer (i.e., substantive knowledge, research expertise, or staff) to the sponsor's program or whether the sponsor's research priorities are congruent or relevant to the agricultural educator's program.

Sometimes a sponsor's research priorities may signal an unrecognized problem. For example, a continuing state and federal priority has been to overcome sex bias in vocational education programs. Such a priority gives us reason to question whether vocational agriculture programs share this problem. In addition to responding to state and federal priorities set by others, university-based agricultural educators can work with personnel in state and federal agencies to influence the agency's research priorities.

From a political point of view, agricultural educators might ask: "Are we getting our share of the program improvement funds?" "If not, why not?" and "How could we get access to available funding?" Agricultural educators will want to review the data in Table 1 to determine how many projects are being funded, the level of funding, and what percentage of the projects are in agricultural education. They will want to compare their state with other states.

#### *Distribution of Funds*

Table 1 presents a summary, by state, of all program improvement projects and agricultural education program improvement projects funded during the 1978 and 1979 fiscal years. During this two year period, 1,560 research, innovative and exemplary, and curriculum development projects were conducted through the state-administered program improvement funds. A total of \$39,205,436 was obligated to support these projects. Agricultural education accounted for 5.3 percent (83 projects) of the program improvement projects and 4.9 percent (\$1,902,149) of the funds expended.

TABLE 1  
 FY 1978 AND FY 1979 STATE PROGRAM IMPROVEMENT PROJECTS  
 BY STATE

State or Territory	Projects Related to Agricultural Education			All Projects			Percent of Funds for Ag Education
	Number of Projects	Amount of Funding	Number of Projects	Amount of Funding	Number of Projects		
Alabama	-	-	10	138,701	0	0	0
Alaska	1	3,000	10	83,714	10	3.6	3.6
Arizona	1	5,000	31	376,176	31	1.3	1.3
Arkansas	2	86,241	19	460,196	19	18.7	18.7
California	5	198,152	54	2,767,715	54	7.2	7.2
Colorado	-	-	14	292,183	14	0	0
Connecticut	2	7,850	26	279,196	26	2.8	2.8
Delaware	-	-	5	61,977	5	0	0
District of Co.	-	-	4	315,273	4	0	0
Florida	-	-	50	1,911,988	50	0	0
Georgia	-	-	12	628,278	12	0	0
Hawaii	1	10,000	6	41,910	6	23.9	23.9
Idaho	1	38,777	22	207,244	22	18.7	18.7
Illinois	12	180,944	134	4,250,485	134	4.3	4.3
Indiana	1	100,403	47	1,543,262	47	6.5	6.5

Iowa	1	1,376	47	842,121	.16
Kansas	9	42,345	31	317,366	13.3
Kentucky	2	58,234	21	430,491	13.5
Louisiana	1	4,933	14	318,032	1.6
Maine	-	-	3	48,384	0
Maryland	1	2,000	65	787,463	.25
Massachusetts	-	-	14	961,228	0
Michigan	-	-	11	865,250	0
Minnesota	2	3,860	36	824,005	.47
Mississippi	1	21,105	10	622,475	3.4
Missouri	1	10,170	20	155,327	6.5
Montana	1	5,000	16	195,701	2.6
Nebraska	-	-	4	54,621	0
Nevada	-	-	8	112,998	0
New Hampshire	-	-	2	20,126	0
New Jersey	-	-	47	827,387	0
New Mexico	-	-	14	518,660	0
New York	2	71,671	91	3,069,511	2.3
North Carolina	-	-	7	198,526	0
North Dakota	5	34,662	29	141,573	24.5

Table 1, Continued

Ohio	-	-	79	2,502,339	0
Oklahoma	-	-	8	75,055	0
Oregon	-	-	37	427,573	0
Pennsylvania	9	217,915	123	2,007,993	10.9
Rhode Island	-	-	9	62,966	0
South Carolina	-	-	3	66,295	0
South Dakota	-	-	4	253,000	0
Tennessee	-	-	29	717,333	0
Texas	10	649,217	95	4,946,973	13.1
Utah	-	-	4	62,896	0
Vermont	2	14,718	12	104,068	14.1
Virginia	2	30,000	54	1,389,483	2.2
Washington	1	2,991	31	222,533	1.3
West Virginia	3	28,925	52	588,619	4.9
Wisconsin	2	65,630	59	847,099	7.7
Wyoming	2	7,000	26	167,210	4.9
Puerto Rico	-	-	1	94,528	0
Totals	83	1,902,119	1,560	39,205,436	4.9

Further analysis of Table 1 reveals that twenty-eight states funded agricultural education projects ranging from one project in each of twelve states to twelve projects in Illinois. Total expenditures for agricultural education projects ranged from \$1,376 in Iowa to \$649,217 in Texas.

A comparison of the expenditures for agricultural education projects to overall expenditures in each state revealed that the percentage of funds directed to agricultural education projects ranged from .2 percent in Iowa to 24.5 percent in North Dakota. The average expenditure per project was \$22,917 for agricultural education projects compared with \$25,132 for all projects. Project size ranged from \$850 to continue a farm management institute in Pennsylvania to \$254,799 to operate an agricultural education instructional materials service in Texas.

#### *Problem Areas*

The data summarized in Table 2 show the problem areas addressed by the state administered program improvement projects. Examination of this table reveals that more than 75 percent of the agricultural education projects addressed problems relevant to federal administrative and legislative priorities. The largest portion of the agricultural education funding (52.5%) focused on curriculum management/curriculum development. This is in contrast to all program improvement funding where 32.4 percent of the funds were directed to curriculum management/curriculum development projects.

Typical of the agricultural education projects funded in the area of curriculum management/curriculum development was a project funded in Arkansas that developed six curriculum guides in the areas of agricultural structures, farm machinery, agricultural metal working, elements of farm and building layout, soybean and rice production, and horticulture. In addition, a transportable model to develop and update curriculum guides based on present and future job market needs will result from the project.

Similarly, a project was funded in Texas to make a comprehensive analysis and revision of the basic curriculum guide for teaching production agriculture.

Further analysis of the problem areas addressed reveals that seven agricultural education projects, accounting for 10.7 percent of the funds, were directed toward special needs populations. Included in this area was a project in Washington that developed course materials to train individuals to provide therapeutic horticultural activities to children, the elderly,

TABLE 2  
 PROBLEM AREAS ADDRESSED BY PROJECTS

	Agricultural Education Projects			All Projects		
	Number of Projects	Funding	Percent of Total Funds	Number of Projects	Funding	Percent of Total Funds
Curriculum Management/ Curriculum Development	35	998,165	52.5	487	12,687,000	32.4
Special Needs (Handicapped, Gifted, Disadvantaged)	7	202,838	10.7	227	6,353,000	16.2
Urban/Rural/Youth	7	112,433	5.9	27	453,000	
Equity/Civil Rights	3	48,454	2.6	60	1,358,000	3.5
Admin. of State/ Local	3	38,012	2.0	33	897,000	2.3
Education to Work Transition	2	31,331	1.6	57	1,387,000	3.5
Planning, Data & Accountability	2	23,398	1.2	150	4,005,000	10.1

Availability/ Accessibility to Adults	2	22,605	1.2	32	517,000	1.3
Basic Skills	-	-	-	24	642,000	1.6
Guidance for Careers/ Vocations	-	-	-	98	2,379,000	6.1
Other Federal Priority	-	-	-	63	1,370,000	3.5
None/Information not Available	22	424,883	22.3	302	7,156,000	18.2
<b>Totals</b>	<b>83</b>	<b>1,902,119</b>	<b>100.0</b>	<b>1,560</b>	<b>39,204,000</b>	<b>100.0</b>

AG DIVISION RESEARCH MEETING

The eighth annual National Agricultural Education Meeting is scheduled for December 4, 1981, in Atlanta, Georgia, with Dr. Maynard Iverson of North Carolina State University serving as chairman. The meeting will convene in the Clayton Room of the Atlanta Hilton, with registration beginning at 8:00 a.m. The first session will begin at 8:30 a.m. in the same room.

mental patients, retarded persons and those with conditions such as blindness and muscular and neurological problems.

Other problem areas addressed by agricultural education projects included rural/urban youth where seven projects accounted for 5.9 percent of the funds. This is compared with 1.2 percent of the total funds being expended in this area. Two projects relating to the availability of vocational education to adults accounted for 1.2 percent of the funds.

#### *Other Findings*

One of the questions frequently raised about state-administered program improvement funding is "What institutions are getting the contract awards?" In agricultural education, most of the program improvement funds have been awarded to four-year colleges and universities (65.3%), followed by local education agencies (16.6%), and two-year educational institutions (6.75). The remaining 11.4 percent is spread among state and intermediate education agencies and private business. This is in contrast to all program improvement funding where less is being conducted by four-year colleges (33.5%) and more by local education agencies (28.6%) and two-year educational institutions (13.4%).

The products and outcomes of agricultural education program improvement projects are predominately aimed at the instructional process. Curriculum and instructional products were planned for 55.4 percent of the projects (62.5% of funding) and inservice education in 13.2 percent of the projects (15.7% of funding). Technical reports, models and feasibility studies, evaluations, placement studies, and network or consortium activities were among the other products and outcomes.

With respect to the targeting of program improvements to educational level, agricultural education directs more funds to combined secondary-postsecondary levels (46.4% vs. 18.5% for all projects) and less to combined postsecondary-adult levels (14.8% vs. 25.6% for all projects).

#### *Summary*

1. Agricultural education is not taking full advantage of available state program improvement funds. Only 28 states have funded projects relating specifically to agricultural education.
2. The amount of funds obligated for individual projects is variable. Funds obligated to individual agricultural

education projects ranged from \$850 to \$254,779.

3. The percentage of total available program improvement funds obligated to agricultural education projects varied widely from state to state. Of the 28 states reporting agricultural education projects, the percentage ranged from .2 percent in Iowa to 24.5 percent in North Dakota.
4. The majority of the agricultural education projects focused on curriculum development. More than half of the agricultural education funds were obligated for curriculum development as contrasted to about one-third of all program improvement funds.
5. Little or no attention has been given to equity/civil rights, transition from education to work, availability/accessibility to adults, and basic skills. Only 5.4 percent of the agricultural education funds have been devoted to these national priority areas.
6. Four-year colleges and universities receive a majority of the funding (65.3%) for agricultural education program improvement projects. This percentage is in contrast to the 33.5 percent of the funds received by four-year colleges and universities for all program improvement activities.

#### *Recommendations*

1. Agricultural educators should investigate the availability of program improvement funds in their states. State staff and teacher educators should make it their business to become familiar with the research coordinating unit and individually or collectively seek funds.
2. Agricultural educators should seriously consider their role in addressing the federal priorities of equity/civil rights, transition from education to work, availability/accessibility to adults, and basic skills.
3. Agricultural educators should become proficient at grantsmanship. Funds are available to those who know how to communicate a good idea.

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