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Self-Study Report: 04 Research and Development Program

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RESEARCH AND DEVELOPMENT PROGRAM

TABLE OF CONTENTS

	Page
DEPARTMENTAL STRATEGIC PLAN FOR AGRICULTURAL EDUCATION RESEARCH AND DEVELOPMENT PROGRAM	69
TABLE 3.1 Research And Development Projects For 1989-90	70
TABLE 3.2 Faculty Research And Development Project Reports For 1983-1985	72
ABSTRACTS OF RESEARCH PROJECTS, 1985-1989	74
FIGURE 3.1 Hatch Funded Project #NEB-24-019	89

DEPARTMENT OF AGRICULTURAL EDUCATION/CENTER FOR LEADERSHIP DEVELOPMENT
STRATEGIC PLAN FOR 1989-91
PROGRAM AREA: RESEARCH AND DEVELOPMENT PROGRAM

Background Statement: The Department recognizes the significant changes in society, and will develop proactive leadership to provide new knowledge as input for public policy, community development, and human resource development.

Program Goal: To develop a quality pro-active departmental effort in the area of research and development which will be responsive to current needs and be respected and recognized at the local, state, national, and international levels.

Statement of Action: Recognizing the broadened role of the Department, the following target areas in research and development are provided:

1. **Teaching Methodology:** including efforts to determine the impact of present teaching practices on learning, and how new information transfer systems and strategies impact teaching and learning.
2. **Emerging Public Policy in the Teaching of Agricultural Sciences in the Public Schools (Grades K-12):** including the development of new educational content packages, based on emerging curriculum needs.
3. **Leadership Development:** including efforts to learn more about characteristics of leaders and effective leadership, and influencing factors.
4. **Outreach Program:** studying methods of delivery of interdisciplinary leadership and education programs.

Primary Contact person: All faculty and staff will coordinate, especially those with research and development appointments (Barrett, Dillon, Horner, Foster). The Chair of the Departmental Research and Development Committee (Dillon) will provide leadership and will report directly to the Department Head (Blezek).

Linkages: Other units within IANR and UNL Teachers College may be involved in research and developmental projects: i.e. Teaching and Learning Center, Department of Vocational and Adult Education.

Time Frame: Proposals may be submitted by staff members at any time to be reviewed in accordance with recently adopted departmental policies and procedures. Only proposals within the four target areas identified will be considered. For 1989-90, thirteen projects for \$360,656 have been approved for eight staff members, and three additional projects for nearly \$500,000 are pending. The goal will be two projects per person for 1990 and 1991 and continued same level of funding. Continuous July 1, 1989 through June 30, 1991.

Resources Needed: Presently 1.25 FTE is available for research and development. Additional staff release time is presently being provided through the generation of outside grants. The goal of the Department is to increase the FTE generated by 2.0 FTE through outside grants as well as through increasing the IANR operating monies by a minimum of ten percent in each of the years 1990 and 1991.

TABLE 3.1

**RESEARCH AND DEVELOPMENT PROJECTS FOR 1989-90
DEPARTMENT OF AGRICULTURAL EDUCATION**

<u>TITLE</u>	<u>SOURCE</u>	<u>LEADER</u>
Establishing a Resource Center for Leadership/Human Resource Development Materials With a Computerized Retrieval System.	Nebraska Department of Education	Miller
Leadership Development for Directors of Leadership Education Programs in Nebraska.	Nebraska Department of Education	Miller
From Regard to Reward: Improving Teaching in the Research Oriented University.	USOE	Barrett
Implementation of a Model Master Teacher Corps.	Nebraska Department of Education	Barrett
Strengthening Human Resources for Nebraska.	Nebraska Department of Education	Bergman
Project for Implementation of the Center For Leadership Development.	Nebraska Department of Education	Blezek
Barriers Which May Impede Change in Secondary Agricultural Education Programs.	College of Agriculture	Dillon
Improvement of Curriculum in the Secondary School Agricultural Education Student Teaching Center.	Nebraska Department of Education	Dillon
Adult Financial Management Project.	Nebraska Department of Education	Foster
Inservice for Adult Financial Management Participants.	Nebraska Department of Education	Foster
Inservice of New Agricultural Education Program Guidelines.	Nebraska Department of Education	Foster
Literacy in Agriculture for Nebraska Schools.	College of Agriculture	Gilberts
Continuation of Model Development to Meet Adult Education Needs in Agriculture.	Nebraska Department of Education	Horner
Continuation of a Program to Enhance Adult Education in Agriculture.	Nebraska Department of Education	Horner

Agriculture in the Classroom (NDAg).	Nebraska Department of Agriculture	Blezek
The Nebraska LEAD Program	Nebraska Leadership Council —	Blezek & Bergman
Increasing The Critical Thinking Skills and Instruction in the College of Agriculture.	College of Agriculture & Kellogg Foundation —	Foster & Gilbertson
Integrating International Perspective into Courses in the Department of Agriculture Education.	College of Agriculture	Foster & Bell
Project to Develop and Purchase Instruc- tional Materials for International Education for a Course Entitled, "Introduction to International Issues in Agriculture".	College of Agriculture	Foster
A Model Experiential Leadership Develop- ment Program in the College of Agriculture.	College of Agriculture	Horner, Bell, Dodge, Foster

TABLE 3.2

FACULTY RESEARCH AND DEVELOPMENT PROJECTS

1983-1984

DEPARTMENT OF AGRICULTURAL EDUCATION

1983-84

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
An Assessment of Professionalism and Leadership of Nebraska Vocational Agricultural Educators.	Research Division	Blezek
Preservice Evaluation of Student Teachers and of Student Teaching Centers.	Research Division	Dillon
Vocational Agricultural and Home Economics Education Programs in Rural and Multi-District Schools.	Research Division	Gilbertson & Newkirk
An Assessment of the Nebraska Vocational Core Curriculum.	Research Division	Horner
An appraisal of Innovative Approaches to Leadership Education/Action for Rural Community Resource Development.	Research Division	Horner
Instructional Improvement in College Instruction.	University of Nebraska-Lincoln, Teaching Council	Barrett
Evaluation of Differences in Student's Learning Types in Mechanized Agriculture and Agricultural Engineering.	University of Nebraska-Lincoln, Teaching Council	Barrett, DeShazer, & Schinstock
Food...Agriculture in the Liberal Arts, A National Dissemination Workshop.	Nebraska Agencies	Blezek
Grantsmanship for the Nebraska Vocational Agriculture Foundation.	Nebraska Agencies	Blezek
Agricultural Education Workshops.	Nebraska Department of Education	Gilbertson
Agricultural Leadership Development Program.	Kellogg Foundation	Horner

1984-85

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
An Assessment of Professionalism and Leadership of Nebraska Vocational Agricultural Educators.	Research Division	Blezek
Preservice Evaluation of Student Teachers and of Student Teaching Centers.	Research Division	Dillon
An Assessment of the Nebraska Vocational Core Curriculum.	Research Division	Horner
An appraisal of Innovative Approaches to Leadership Education/Action for Rural Community Resource Development.	Research Division	Horner
MBTI Profile of Faculty and Students	College of Agriculture	Barrett
A Preference Profile of Agricultural Leaders in Nebraska.	College of Agriculture	Barrett, Horner
A National MBTI Profile of Preference Type for Teacher Educators and State Supervisors in Agricultural Education.	College of Agriculture	Foster, Horner
Apprehensions of Ag Ed Majors Before and After Student Teaching.	College of Agriculture	Foster
Factors Which May Adversely Affect Student Participation in Supervised Occupational Experience Programs in Nebraska.	College of Agriculture	Foster
Agricultural Leadership Development Program.	Kellogg Foundation	Blezek
Grantsmanship for the Nebraska Vocational Agriculture Foundation.	Nebraska Agencies	Blezek
Agriculture in the Classroom.	State Department of Agriculture	Gilbertson
Agricultural Education Workshops.	Nebraska Department of Education	Gilbertson
Professional Development Leave.	College of Agriculture	Dillon
Instructional Improvement, College of Agriculture	College of Agriculture & UNL Teaching Council	Barrett
Professional Development Leave and Conferences.	University of Nebraska-Lincoln Teaching Council	Horner

**ABSTRACTS OF RESEARCH PROJECTS
1985-1989**

DEPARTMENT OF AGRICULTURAL EDUCATION

1985-86

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Internship Experience in Agribusiness for Vocational Teachers.	Nebraska Department of Education	Dillon

Project Outcomes: Seven secondary vocational agriculture teachers participated in the project; and worked in seven different types of agribusiness (80 total days). The June 1986 workshop produced new supporting instructional materials. An average of 15 new units per teacher are planned to be taught in 1986-87, for a total of 292 instructional days.

Development of a Program to Meet Adult Education Needs in Agriculture	Nebraska Department of Education	Horner
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Project Outcomes: Some 60 local vocational agriculture instructors, student teachers and state-level agricultural educators were involved in tours, workshops, and/or classes to up grade technical and professional competencies for adult education in agriculture.

Technical Inservice Education for Vocational Educators in Agriculture	Nebraska Department of Education	Bell
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Project Outcomes: Six inservice workshops were planned for secondary instructors. Thirty-nine percent of current vocational agriculture instructors attended at least one workshop. Instructional materials for classroom use were provided participants at each workshop. Seventy percent of first time teachers participated in at least one workshop. One workshop was specifically designed for efficient utilization of mechanical agriculture curriculum and facilities. One postsecondary workshop was conducted.

A Meaningful FFA program of Activities in the Secondary Education System.	Nebraska Department of Education	Bell
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Project Outcomes: Administrators are better informed about VoAg/FFA activity participation. A list of 15 recommendations have been created and approved to manage future VoAg/FFA activity participation. District management teams have been created in each vo ag district. District calendars were established in all of 12 districts in 1986.

Supplemental Funding of University of Nebraska-Lincoln-Young Farmers/Ranchers Educational Association.	Nebraska Department of Education	Foster
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Project outcomes: Member participation remained steady. Quality and quantity of programs improved because of increased support. Issues in agriculture were addressed in greater depth because of the availability of supplemental funding.

1985-86 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Improvement of Vocational Education Programs in Nebraska Through Improved Preservice Teacher Education in Agriculture.	Nebraska Department of Education	— McClain —

Project Outcomes: The present preservice Ag Ed curriculum was evaluated by recent program graduates. A competency-based curriculum was rated by a panel of outstanding vo ag teachers/administrators and teacher educators. Four Ag Ed departments at major universities and six local outstanding vocational agriculture programs were visited by UNL Agricultural Education staff.

Development of Competency-Based Curriculum Materials and Instructional Software for Vocational Agriculture in Nebraska.	Nebraska Department of Education	Foster
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Project Outcomes: A 30-unit curriculum resource in Crop and Soil Science was developed. A 25 unit curriculum resource in Agricultural Mechanics was revised and adopted to Nebraska. Computer assisted instructional programs for Crop and Soil Science and Agricultural Mechanics were developed and integrated into the curriculum units.

Development of a Program to Meet Technological and Financial Management Needs for Adult Education in Agriculture.	Nebraska Department of Education	Foster
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Project Outcomes: Twelve vocational agriculture instructors attended workshops and classes to learn to integrate computer technology and financial management concepts into adult education in agriculture. Instructors planned expanded adult offering around financial management and access to computer technology to farmers and ranchers in their local areas.

Implementation of Agribusiness Employment.	Nebraska Department of Education	Bell
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Project Outcomes: Thirty-two hours of classroom instruction provided each participant on the MAVCC Employment in Agribusiness curriculum. Twenty hours occupational experience was obtained by each participant in an agribusiness. All participants created a curriculum integration plan. Six of seven participants enrolled in an extended internship experience in agribusiness.

Continuing Education Curriculum Development Handbook for Vocational Agriculture	Nebraska Department of Education	Gilbertson
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Project Outcomes: "Adult Education in Agriculture: A Handbook for Nebraska Vocational Agriculture Teachers" was developed. The 311 page publication will be disseminated to vocational agriculture teachers at the 1986 Vocational Education Conference at Kearney.

1985-86 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Preservice Evaluation of Student Teaching Centers.	Research Division	— Dillon
Perceptions of Secondary Administrators and Vo Ag Teachers Regarding Administration of Adult Programs Through Secondary Schools in Nebraska.	College of Agriculture	— Adelaine & Foster
Perceptions of Secondary School Administrators Regarding Employment Criteria for Hiring Vo Ag Teachers in Nebraska.	College of Agriculture	Foster
Teacher Effectiveness Program	College of Agriculture	Barrett
Agriculture in The Classroom Program	State Department of Agriculture	Gilbertson

1986-87

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Scientific Concepts in Agriculture Curriculums.	Nebraska Department of Education	Bell

Project Outcomes: Forty five vocational agriculture programs in Nebraska high schools and their corresponding science departments were surveyed to determine the degree of science concepts being taught in vocational agriculture. The results of this survey served as a basis of discussion between fifteen secondary school administrators, science educators and vocational agriculture instructors. A list of eight recommendations were formulated by conference participants regarding the question of awarding science credit for vocational agriculture instruction.

Onsight Visitation of Horticulture Programs Within Traditional Vocational Agriculture Programs.	Nebraska Department of Education	Bell
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Project Outcomes: Six representatives of Nebraska vocational agriculture visited eight different high school programs in South Dakota, Minnesota, and Iowa. Resource guides for instruction, course outlines, plant growing facilities, etc. were surveyed at each site visited. Philosophies of horticulture instruction were also exchanged with instructors of vocational agriculture, administrators, parents and students.

1986-87 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Technical Education on Curriculum Topics and Laboratory Skills in Vocational Horticulture Instruction.	Nebraska Department of Education	— Bell

Project Outcomes: Fourteen instructors of vocational agriculture participated in a five day workshop on instructional techniques in horticulture. The workshop included discussion on the horticulture industry, propagation, facility construction and maintenance, gardening, pest control strategies, turf grass management, state contest participation, and curriculum design. The workshop was instructed by Dr. Jay Fitzgerald, UNL Horticulture Department.

Implementation of Agribusiness Curriculum and Internship Experience.	Nebraska Department of Education	Dillon & Bell
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Project Outcomes: Seven vocational agriculture teachers participated in a thirty-two hour workshop to learn how to integrate the MAVCC Employment in Agribusiness curriculum into their curriculum program. Participants also received twenty hours of occupational experience. Five of the seven teachers subsequently participated in a total of 24 days of internship experience in agribusiness in the local area. The five teachers spent thirty two hours in writing curriculum materials to support the MAVCC, based on their internship experience in agribusiness.

Development of a Program to Meet Adult Education Needs in Agriculture.	Nebraska Department of Education	Horner
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Project Outcomes: Some 30 local vo ag instructors were involved in out state tours and 60 were in seminars and workshops to up-grade technical and professional competencies for adult education in agriculture. A state Adult Ed task force was convened to provide direction on continuing education in agriculture. Also, the Nebraska Association for Adult Agriculture Educators was formed.

Development of Competency Based Curriculum Materials and Micro-computer Software for Vocational Instruction in Animal Science and Agricultural Mechanics.	Nebraska Department of Education	Foster
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Project Outcomes: During the 1986-87 school year, the curriculum project has made 175 copies of the Crop & Soil Science I, II, III and Agricultural Mechanics I and II curriculum guides. The guides were inserviced and distributed at 10 district meetings across Nebraska, at 2 on campus meetings and 1 meeting at the State Vocational Conference in Kearney. Two Advisory Committee meetings were held during the last year. Currently the final revisions are being prepared for the Farm Business Management and the Animal Science curriculum guides. The guides are funded for duplication during the coming fiscal year and will be inserviced and distributed as they become available.

1986-87 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
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Equipment Requisition for Ag Ed Computer Laboratory.	Nebraska Department of Education	Foster
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Project Outcomes: A small computer lab was set up in the learning resource center to provide undergraduate agriculture education students access and training on the microcomputer. This is used to provide block students some experiences with using the microcomputer in an educational setting as well as help them in developing user skills in regards to management tasks related to running a vocational agriculture program. These computers are available to and were used by many graduate agricultural education students during regular as well as summer sessions.

Adult Financial Management Education in Agriculture.	Nebraska Department of Education	Foster
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Project Outcomes: Ten vocational agriculture instructors and their adult farm/ranch partners attended workshops and classes to learn to integrate computer technology and financial management concepts into their adult agriculture programs. This was the second year for the project. The first years groups of instructors were given the opportunity to further their skills learned by providing an advanced workshop in agricultural accounting. Various instructors had plans to expand or enhance their offerings in adult agricultural financial management.

Telecommunications In-Service Workshops.	Nebraska Department of Education	Foster
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Project Outcomes: Telecommunications workshops were conducted at four different sites across the state. These workshops were intended to provide basic information and knowledge on the use of telecommunications with the microcomputer. Equipment setup and acquisition, as well as logging on and using Agnet and Agri Data was discussed. Participants were given information packets regarding various aspects of telecommunications and a simulation program for them to practice logging on to the Ed Neb system.

A Program of Agricultural Leadership Development for Adults in Nebraska.	Nebraska Department of Education	Blezek
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Project Outcomes: Sixty young agriculturalists, with demonstrated leadership potential, participated in the project which was composed of 13 three-day seminars, a ten day U.S. study travel seminar and a three week international study travel seminar. These persons are being trained to become the problem solvers, decision makers and spokespersons for Nebraska and Nebraska Agriculture. Also involved in the project was a five year follow-up study of the first five years of the Nebraska LEAD Program.

1986-87 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Exploring Career Opportunities in Agriculture.	Nebraska Department of Education	Gilbertson
<p>Project Outcomes: The Exploring Careers in Agriculture project has resulted in the development of a list of objectives, activities, and resources which are available to help plan and conduct career exploration type courses. The list consists of over 90 objectives and 150 activities. Many of the activities and resources have been used in Nebraska or are specific to Nebraska. The 90 day activities and objectives which will result in a 9, 18, or 36 week course of study.</p>		
Task Force for Agricultural Education.	Nebraska Department of Education	Gilbertson
<p>Project Outcomes: A task force of agricultural, business, educational and other leaders was formed to formulate a role, mission, and purpose statement for Agricultural Education, for the years 1987-2001. The task force, with the input from interested people from across the state of Nebraska, gave direction in the areas of curriculum, role of student organizations, and roles of relationship of local schools, teacher education, and state department personnel were studied.</p>		
Establishment of an Instructional Materials Packet for Nebraska Vo Ag Teachers.	Nebraska Department of Education	Foster
<p>Project Outcomes: A curriculum packet was developed from project seed money for the vocational agriculture instructors across the state. The packet contains a video tape from ABS breeder service as well as a notebook of shop project blueprints. Many other items are also included in the packet. These packets will be given to each of the district representatives at state vocational conference in Omaha for them to distribute in their local districts.</p>		
Preservice Evaluation of Student Teaching Centers.	Research Division	Dillon
Perceptions of Secondary Administrators and Vo Ag Teachers Regarding Administration of Adult Programs Through Secondary Schools in Nebraska.	College of Agriculture	Adelaine & Foster
Perceptions of Secondary School Administrators Regarding Employment Criteria for Hiring Vo Ag Teachers in Nebraska.	College of Agriculture	Foster
Teacher Effectiveness Program	College of Agriculture	Barrett

1986-87 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Agriculture in the Classroom Program.	Nebraska Department of Agriculture	— Gilbertson

1987-88

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Development, Implementation and Delivery of Program of Agriculture Leadership.	Nebraska Department of Education	Blezek

Project Outcomes: Sixty adult men and women agriculturalists, with demonstrated leadership potential, participated in the project which was composed of 13 three-day seminars, a ten day U.S. study travel seminar and a three week international study travel seminar. Through the curriculum, participants balance technical advances and economic considerations with stewardship of natural resources and human concerns. Exposure to a variety of opinions and information enhances the effectiveness of emerging agricultural and rural leaders.

Implementation of Agriculture Curriculum and Internship Experiences.	Nebraska Department of Education	Dillon
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Project Outcomes: Seven vocational agriculture teachers participated in a thirty hour workshop and 20 hours of internship in occupational experience in addition to 20 days of internship in agribusiness in their communities to learn how to integrate the MAVCC "Employment in Agribusiness curriculum" into their program.

Adult Financial Management Education Program Planning and Development.	Nebraska Department of Education	Foster
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Project Outcomes: Ten vocational agriculture instructors were invited to be "Class 3" of the Adult Financial Management project. Participants and one adult farmer from each of their communities attended twelve weeks of classes to learn to use the Agri-Ledger computerized accounting package, the AgNet information network, and the AgriData information network. Teachers also participated in workshops to integrate marketing strategies into their adult education programs.

1987-88 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Establishment of Statewide Telecommunications Network for Vocational Agriculture Instructors.	Nebraska Department of Education	Foster

Project Outcomes: An advisory committee of Vocational Agriculture teachers evaluated several telecommunications systems in attempting to select one on which to build a Nebraska Network. After several meetings and much discussion, the AgriData information system was selected over AgNet, EDNEB, and MIX to carry the Nebraska Vocational Agriculture network. The decision was based primarily on the ability of AgriData to develop unique curriculum and instructional materials for vocational agriculture and adult education programs. Several schools field-tested the system during spring semester, 1988.

Development of a Suggested Scope and Sequence for Vocational Agriculture Curriculum in Animal Science and Farm Business Management.	Nebraska Department of Education	Foster
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Project Outcomes: During 1987-88, 150 copies of the Animal Science and Farm Business Management Curriculum Guides were printed and are ready for distribution pending the arrival of 3-ring notebooks and tabs. A suggested scope and sequence of agricultural content have been developed with the help of a vocational agriculture teacher advisory committee. All material will be distributed prior to the start of the fall semester.

VoAg Recordbook Revision and Computerization	Nebraska Department of Education	Foster
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Project Outcomes: The vocational agriculture recordbook adopted in 1985-86 was reviewed by Nebraska VoAg Teachers and several suggestions were made for improvement. Suggestions will be considered by the NVAA SOE and Instructional Materials Committee at the 1988 NVAA Conference. Computerization of the book is progressing and is scheduled for completion by January, 1989. A resource book will be developed to assist Vocational Agriculture Teachers with using the new computerized version. The project was extended to June 1989 to allow the programming to be completed.

Continuation of Program and Development of Guidelines in Adult Education in Agriculture.	Nebraska Department of Education	Horner
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Project Outcomes: Developed some "model" guidelines for coordinated efforts by Vocational Agriculture, Extension, community colleges, and/or agribusinesses, etc., for the enhancement of adult agricultural education. Some 25 teachers involved in out-of-state "mentoring" to motivate and improve teacher competency in conducting continuing education. That is, they study for several days with one or more adult educators.

1987-88 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Promoting Employment Opportunities In Agricultural Education for Women.	Nebraska Department of Education	— Agnew
<p>Project Outcomes: As a result of this project, 1800 copies of a (19 x 21") poster with tearoff information cards was produced and mailed to over 550 persons or agencies which have contact with young women and men who may be seeking information about career opportunities in Agricultural Education. Also, 100 copies of a brochure booklet and 200 copies of an insert was developed. The focus of these career information items was to encourage women into agricultural education.</p>		
Building A Teaching Community: Recognizing and Rewarding Effective Teaching.	Fund For Improving Post- Secondary Education, U.S. Office of Education	Barrett
<p>Project Outcomes: A leadership team of Vice Chancellor, Deans, Department Heads, senior faculty of the College of Arts and Sciences and Agriculture formulated to design strategies to overcome the UNL institutional problem of inadequate reward for teaching in these two colleges. A second team of teaching faculty from both colleges tested various teaching evaluation processes and began to bridge the gap of differences between a professional college of agriculture and a liberal arts college. Results from both teams became the basis for a full 3 year proposal to the U.S. Office of Education.</p>		
National Study of Hiring Criteria used for Employment of Extension Personnel.	College of Agriculture	Agnew & Foster
National Study of Research Issues in Need of Investigation by State Extension Directors and Extension Educators.	College of Agriculture	Agnew & Foster
Teacher Effectiveness Program.	Nebraska Department of Education	Barrett
Preservice Evaluation of Student Teaching Centers.	Research Division	Dillon
Women in Agricultural Education - perceptions of women VoAg teachers in the midwest.	College of Agriculture	Foster
Agriculture in the Classroom Program.	State Department of Agriculture	Blezek
The Nebraska LEAD Program.	Nebraska Agriculture Leadership Council	Blezek & Bergman

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Developing Career Strategies For Women Currently Employed or Preparing for Employment in the Field of Agriculture Education.	Nebraska Department of Education	Agnew/Blezek

Project Outcomes: Women in Agriculture Education were brought together to share their insights and experiences. At the equity conference the project participants met with the advisory committee members to discuss activities for the year. Jim Knight talked with the participants and advisory committee members about strategies for helping them get the experiences needed. Other activities to help the women integrate into the profession includes: 1) Interact with and observe successful women in the profession, 2) Attend professional meetings, 3) Attended personal development seminars and workshops, and 4) Regularly met to discuss problems and concerns. Five participants attended the Women in Vocational Education Conference in Ohio. Subscriptions to professional magazines, books and listings of resource materials available were provided to participants. Three issues of a newsletter were sent to participants.

Development of a Model Master Teacher Corps.	Nebraska Department of Education	Barrett
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Project Outcomes: Each high school principal in Nebraska who had an agricultural teacher was invited to nominate their teacher(s) to become a candidate for the master teacher program. Following nomination, 15 teachers applied and 10 were accepted as candidates. Each candidate was assigned an Agriculture Education Department staff mentor. Together, the candidate and mentor developed a growth plan to become a master teacher. The growth plans included 3 major areas, a. teaching effectiveness, b. curriculum improvement, and c. personal growth. Each candidate received a review of their effectiveness by department staff and candidate's students. Candidates are now pursuing their plans. Several traveled to outstanding programs in Pennsylvania, Ohio and California to examine curricular innovations. The candidates were: Tom Hermance, David Creger, Duane Hoesing, Mike Davis, and Russ Lechtenburg. Each candidate has participated in a 3 day workshop on teaching effectiveness at UNL.

Teacher Effectiveness Program.	Research Division and College of Agriculture	Barrett
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Project Outcomes: Seven high schools that offered agricultural education and other vocational subjects were involved. All teachers were given in-service programs on how to improve their teaching effectiveness. Each teacher's effectiveness was measured by observation and by student evaluation of classroom climates. Teachers who were involved for the 3 years, state that they perceive themselves to be more effective, and find teaching more enjoyable. More empirical data will be forthcoming.

1988-89 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Developing a Teaching Community - Rewarding Teaching.	UNL Teaching Council and College of Agriculture	Barrett & Narveson

Project Outcomes: Two faculty study groups were organized from the College of Agriculture and Arts and Sciences. Each group is made up of faculty from both colleges. Their purpose is to develop a community of faculty who are concerned about improving teaching and the rewarding of teaching. One study group is examining and experimenting with various methods of teaching, then measuring outcomes. The second group did study methods of evaluating teaching that could be used in a reward system.

Integration of Science Education into Vocational Agriculture.	Nebraska Department of Education	Bell
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Project Outcomes: Two documents were researched and developed dealing with science education in agricultural education. One document is a four lesson exploratory curriculum on food science and technology. The other is a guide for planning integration of science emphasis into agricultural education instruction. Both documents were introduced and explained to 21 agricultural education instructors at a two day workshop in June 1989.

A Program of Agricultural Leadership for Changing Needs of Adults in Nebraska.	Nebraska Department of Education	Bergman
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Project Outcomes: Developed leadership potential in sixty adult men and women who demonstrated commitment, interest and motivation to increase their knowledge and understanding of:

- Nebraska business and industry
- Economic and social change
- Organizational decision making and problem solving
- The role of local, state, national and international political systems
- Needs and aspirations of other cultures and societies
- The world as a global economy
- Interpersonal skills essential for leadership

Implemented teaching methods that were meaningful to the adult learner and considerate of individual learning styles. Incorporated activities not all limited to the classroom for optimal results.

1988-89 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Development of the Teacher Education Component of the Nebraska Institute (Center) For Leadership Development.	Nebraska Department of Education	Blezek

Project Outcomes: This project focused on the changes that we need to make in teacher education to help ensure that leadership will be there in the future. Specifically, this project focused on the review and evaluation of materials used to provide leadership education, and the review of leadership educational programs across the U. S. This information was used in the development of a new course in leadership development and the refinement of existing courses was undertaken. The leadership education programs being conducted in Nebraska were also surveyed to determine the needs and opportunities in the state. Through the development and establishment of the Center For Leadership Development, a means of implementing the leadership education for vocational educators is now in place.

A Feasibility & Planning Project for the Establishment of the Nebraska Institute for Leadership Development.	Nebraska Department of Education	Blezek
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Project Outcomes: The primary outcome has been the establishment of a center for leadership development. The Center will provide and encourage educational programs in leadership/human resource development for all Nebraskans.

This will be accomplished through programs and workshops in leadership education, forums for discussion of leadership issues, and by assisting groups, individuals, and organizations seeking or providing leadership education. A state wide needs assessment was conducted to help establish the extent of need and the areas of need.

Improvement of Curriculum in the Secondary School Vocational Agriculture Student Teaching Center.	Nebraska Department of Agriculture	Dillon
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Project Outcomes: Four agricultural education instructors visited agricultural education programs at Wauseon, Columbus, and Montgomery County Ohio. Following the experience, teachers reviewed their local program, and made recommendations concerning program changes.

1988-89 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Preservice Evaluation of Student Teaching Center.	Research Division	Dillon

Project Outcomes: Research to develop measurable criteria for selecting secondary schools as student teaching centers in agricultural education revealed that: 1) experience in agricultural occupations was not a predictor of success in basic college courses in agriculture, 2) there was a wide range of differences among superintendents, principals, agriculture teachers, and secondary senior agriculture students concerning the emphasis placed on 32 agriculture/agribusiness subject matter areas taught in the Nebraska secondary school. Superintendents rated the emphasis significantly higher in 13 of the 32 subject areas. There were only 2 subject areas where congruent perceptions existed; agricultural mechanics and supervised agricultural experience programs, 3) joint Nebraska Department of Education and UNL Agricultural Education staff evaluations of schools being used as student teaching centers agree with the perceptions of student teachers' experience in these student teaching centers.

Barriers Which May Impede Change in Secondary Agricultural Education Programs.	College of Agriculture	Dillon
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Project Outcomes: Fifty Nebraska agricultural education instructors, 49 superintendents, 48 principals, and 38 school board presidents responded to a 57 item instrument which listed possible barriers to change in local agricultural education programs. Eleven barrier categories were identified. Significant differences were found among the four groups for seven of the eleven barrier categories. Agriculture teachers believed forty-one of the items were barriers to change in local agricultural education programs, while superintendents, principals, and school board presidents believed only sixteen, twenty-one, and twenty-six items, respectively, were barriers to change.

Adult Financial Management Education Program Planning and Development.	Nebraska Department of Education	Foster
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Project Outcomes: Ten secondary agricultural education instructors were invited to be in class 4 of the Adult Financial Management project. Mr. Irv Wedeking conducted financial management accounting classes for the teachers and a representative adult from their community. Schools participating were provided subscriptions to AgriData, and provided workshops in how to use AgriData, Data Transmission Network, and AgriLedger Accounting Packages.

1988-89 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Scope and Sequencing of Agricultural Education Curriculum.	Nebraska Department of Education	Foster
<p>Project Outcomes: Comprehensive public school agricultural education program guidelines were developed for K-12 plus adult programs. Accompanying the program guidelines are new FFA and SAE materials to be integrated into Nebraska programs. Specific guidelines for elementary agricultural education, junior high programs, secondary agricultural education programs and adult education are now provided. In addition, the Employment in Agribusiness MAVCC materials were distributed to all teachers in the state.</p>		
Continuation of Model Development and a Program to Meet Adult Education Needs in Agriculture.	Nebraska Department of Education	Horner
<p>Project Outcomes: Refined "model" guidelines for coordinated efforts by Agricultural Education, Extension, community colleges and/or agribusinesses, etc., for the enhancement of adult agricultural education. Provided programs of attendance and professional conferences on adult agricultural education for numerous local agricultural education instructors. Some 25 teachers involved in out-of-state "mentoring;" that is, they study for several days with one or more adult educators to motivate and improve teacher competency in conducting continuing education.</p>		
Improving Teacher Effectiveness in Conducting Instruction on Sustainable Agriculture.	Nebraska Department of Education	Horner
<p>Project Outcomes: Surveyed needs and competency levels of Nebraska Agricultural Education instructors in the areas of sustainable agriculture and utilization of Interactive Video discs. Acquired staff expertise, equipment and materials in these areas. Provided study tours, workshops, along with support materials for agriculture education instructors in utilizing interactive videodisc in teaching sustainable agriculture.</p>		
Agriculture in the Classroom.	State Department of Agriculture	Blezek Gilbertson
The Nebraska LEAD Program.	Nebraska Leadership Council	Blezek & Bergman
Increasing the Critical Thinking Skills and Instruction in the College of Agriculture.	College of Agriculture	Foster & Gilbertson
Integrating International Perspectives into Courses in the Department of Agricultural Education.	College of Agriculture	Foster & Bell

1988-89 (Cont'd)

<u>PROJECT NAME</u>	<u>SOURCE</u>	<u>LEADER(s)</u>
Project to Develop and Purchase Instructional Materials for International Education for a Course Entitled "Introduction to International Issues in Agriculture."	College of Agriculture	— Foster
A Model Experiential Leadership Development Program in the College of Agriculture.	College of Agriculture	— Horner, Bell, Dodge & Foster

Figure 3.1

PRESERVICE EVALUATION OF STUDENT TEACHERS AND STUDENT TEACHING CENTERS

HATCH FEDERAL PROJECT
#NEB-24-019
1983-1989

RESEARCH WORK UNIT/PROJECT DESCRIPTION - RESEARCH RESUME U.S. DEPT. OF AGRICULTURE, STATE AND LOCAL AGRICULTURAL EXPERIMENT STATIONS AND OTHER INSTITUTIONS		DATE: June 1983	NUMBER: 11
1. ACCESSION NO. 0090656	2. AGENCY IDENTIFICATION NO. CSRS NEB	3. WORK UNIT/PROJECT NO. NEB-24-019	4. STATUS New <input checked="" type="checkbox"/> A Extended <input type="checkbox"/> B Revised <input type="checkbox"/> C
5. TITLE Preservice Evaluation of Student Teachers and of Student Teaching Centers.			
6. PERFORMING ORGANIZATION Department of Agricultural Education 302 Agricultural Hall Institute of Agriculture & Natural Resources University of Nebraska-Lincoln		7. RESPONSIBLE ORGANIZATION Agricultural Experiment station Agricultural Hall, East Campus Institute of Agr. and Natural Resources University of Nebraska-Lincoln	
8. CITY Lincoln	9. STATE/COUNTRY Nebraska	10. ZIP CODE 68583	11. STATE Nebraska
12. INVESTIGATOR NAME(S) (Last name & initials) 1. Dillon, R. D.		13. RESPONSIBLE INDIVIDUAL (Last name & initials) Orvedt, J. T.	
14. PROJECT TYPE 17.1. FOR USDA USE A <input type="checkbox"/> Contract B <input type="checkbox"/> Grant C <input type="checkbox"/> Coop. Agmt. D <input type="checkbox"/> In-house		15. CONTRACTS, GRANTS AND COOPERATIVE AGREEMENTS 18.1. CONTR./GR./AGMT. NO. 18.2. TOTAL \$YS. 18.3. \$ P.Y.	
19. FACILITIES a <input type="checkbox"/> Federally-owned b <input type="checkbox"/> Federally-leased c <input type="checkbox"/> Combined d <input type="checkbox"/> State e <input type="checkbox"/> Other		20. OBJECTIVES AND APPROACH (Use space needed for "20. OBJECTIVES", then indicate "20. APPROACH") Objectives: (1) To develop measurable criteria for selecting secondary school teaching centers for undergraduate vocational agriculture student teachers, (2) To determine the relationships between previous occupational experience of prospective students in agricultural occupations, and performance in selected basic agriculture college courses, (3) To determine the relationships of occupational experiences of vocational agriculture teachers to the emphasis of local vocational agriculture programs being conducted, (4) To develop and test a model for placement of student teachers. Approach: (1) Prepare and field test a list of criteria for selecting student teaching centers for undergraduate agricultural teacher education, (2) Study the relationships between agricultural occupational experiences and academic performance in selected undergraduate courses in agriculture, (3) Compare the emphasis of occupational experience of teachers to the emphasis of the local program being conducted, and (4) To design and implement a model for placing student teachers in agricultural education.	
21. KEYWORDS Preservice Evaluation Student Teachers Student Teaching Centers			
RECOMMENDED		APPROVED (Check applicable one) CONCURRED	
SIGNATURE	TITLE	DATE	SIGNATURE
<i>Roy D. Dillon</i>	Professor	6/21/83	<i>Alvin J. ...</i>
<i>Robert ...</i>	Project Leader	6/22/83	
	Head, Agr. Education Dept.		
24. AWARD DATE (Day, Mo., Yr.)	25. START DATE (Day, Mo., Yr.)	26. TERMINATION (Day, Mo., Yr.)	DURATION (Months)
	01/07/83	30/06/88	60
FOR USDA USE <input type="checkbox"/> Project referred and cleared by all interested agencies for entry into CRIS.		SIGNATURE <i>Edwin G. Weeks</i> DATE 8/5/83	