

SOUTH DAKOTA BOARD OF REGENTS

Full Board

AGENDA ITEM: 22 – B

DATE: June 10-11, 2015

SUBJECT: New Program: SDSU MS in Agricultural Education

South Dakota State University (SDSU) requests authorization for a Master of Science in Agricultural Education. The program would focus on agricultural education in multiple settings, including non-profit organizations, formal education environments, and the Cooperative Extension Service (CES).

The Board approved the Intent to Plan at the [October 2014](#) meeting with the following conditions:

1. *The university will research existing curricula, consult with experts concerning the curriculum, and provide assurance in the proposal that the program is consistent with current national standards and with the needs of employers.*
2. *The proposal will define the specific knowledge, skills, and competencies to be acquired through the program, will outline how each will be obtained in the curriculum and will identify the specific measures to be used to determine whether individual students have attained the expected knowledge, skills, and competencies.*
3. *The university will not request new state resources and the program proposal will identify the sources and amounts of all funds needed to operate the program and the impact of reallocations on existing programs.*

University Mission and Priorities

The proposed program is within the statutory mission of SDSU as described in SDCL 13-58-1, including providing “undergraduate and graduate programs of instruction in the liberal arts and science and professional education in agriculture, education . . . and other course or programs as the Board of Regents may determine.” In addition, the “South Dakota State University Mission Statement” in Board Policy 1:10:2 calls for SDSU to provide “professional

(Continued)

RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR

Approve SDSU’s new program proposal for a M.S. in Agricultural Education as described in Attachment I.

education in agriculture” and for the “transference of knowledge through the Cooperative Extension Service.”

System Strategic Goals

The program is consistent with the Board of Regents 2014-2020 Strategic Plan, including growing the number of graduate degrees awarded as described in Goal 1, growing the number of graduate programs as described in Goal 2, and the development of academic programs that align with state workforce needs as described in Goal 3.

Workforce Need, Student Demand, Projected Graduates

The program will benefit career and technical education, both of which are priorities in South Dakota. SDSU reports that only 2 of 80 agricultural education teachers in the state currently possess a master’s degree. In addition, the US Department of Labor Bureau of Labor Statistics reports an expected growth in employment for career and technical education teachers of 9 percent through 2022. SDSU plans to graduate 5-7 students from the program annually.

Development and External Review

SDSU developed the program through internal discussion of faculty and administrators in addition to reviewing curricula from other institutions, including the MS in Agricultural Education at Iowa State University. Implementation of the program requires the development of four new courses. The program will follow the Council for the Accreditation of Educator Preparation (CAEP) standards.

Dr. Gary Moore, Director of Graduate Programs for Agricultural and Extension Education at North Carolina State University, performed an external review of the proposed program in accordance with Board Policy 2:1. Dr. Moore’s report and SDSU’s response are included as attachments.

Board Policy

SDSU is not requesting any exceptions to Board Policy.

Off Campus and Distance Delivery

SDSU requests authorization to deliver the program online.

Budget and Resources

SDSU does not request any new State resources to implement or maintain the proposed program. SDSU will fund the program through reallocation of existing resources.

**South Dakota Board of Regents
New Graduate Degree Program**

University:	South Dakota State University
Proposed Graduate Program:	Master of Science
Degree:	Agricultural Education
Existing or New Degree(s):	New
Intended Date of Implementation (term):	Fall 2015
Proposed CIP code:	13.1301
University Department	Teaching, Learning and Leadership
University Division	College of Agriculture & Biological Science/ College of Education & Human Sciences

University Approval

To the Board and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

David L. Chicoine

President of the University

March 11, 2015

Date

After approval by the President, a signed copy of the proposal should be transmitted to the Executive Director. Only after Executive Director review should the proposal be posted on the university web site and the Board staff and the other universities notified of the URL.

1. What are the purposes of the proposed program?

South Dakota State University (SDSU) requests authorization to offer a M.S. in Agricultural Education for distance delivery. This program will focus on the teaching and learning processes across a variety of settings including non-profits, formal education environments, and the Cooperative Extension Service (CES). Specifically, some educational institutions would include, in-state and out-of-state high schools and technical schools. The latter would include the local institutions such as Mitchell Technical Institute, Lake Area Technical Schools and Southeast Technical Institute. Other organizations whose employees would benefit from this program include Boys and Girls Club, Ag United and Cooperative Extension Services located in each state across the nation.

The proposed graduate program will be developed through an interdisciplinary collaboration between the College of Education and Human Science and College of Agriculture and Biological Sciences. Courses will be offered from both colleges.

The University will not request new state resources. The program will be funded with redirection of existing resources. The degree will be delivered using resource redirections and self-support tuition revenue. The proposed program supports the system strategic goals (Policy 1:21) and State initiatives:

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New Program: Master of Science in Agricultural Education

- Expand graduate education - this new program will provide additional opportunities for master's level study in education in a field central to the state's economy
- Expand research initiatives
- Economic Development & Quality of Life: Contributes to workforce development and quality of life by expanding academic programs to meet future workforce needs, offering online programs.

Expected Student Demand for the Program

The proposed graduate program is in response to the interest expressed by non-profit organizations, educators and agricultural professionals across South Dakota and the country.

Members of the South Dakota Association of Agricultural Educators (SDAAE) were surveyed during summer 2013 and of the 80 secondary agricultural education instructors more than 35 instructors indicated they were actively seeking an advanced degree. Additionally, the post-secondary faculty at South Dakota's four technical institutes in the area of agriculture were also surveyed and from the 40 individuals surveyed more than 25 of them indicated they were actively seeking a way to obtain an advanced degree. Many individuals employed at the state's technical institutes typically do not have any teaching experience, but an extensive amount of industry experience. Having a way to obtain teaching skills is critical for the success of the state's technical school programs.

Expected Workforce Demand for Graduates

According to the United States Department of Labor - Bureau of Labor Statistics¹, employment in career and technical education teachers is expected to grow at 9 percent from 2012 to 2022, as fast as the average for all occupations.

According to the United State Department of Agriculture (USDA), the agricultural, food and renewable natural resources sectors of the U.S. economy will generate an estimated 54,400 annual openings for individuals with degrees in the agricultural industry. Eleven percent of the jobs are expected to be in agricultural education and communications².

Need for Proposed Program

The proposed program is essential to meet the needs of professionals within non-profit organizations, technical institutes, and agricultural education for on-going professional development, which in turn, support the growing agricultural industry across the state and region.

¹ <http://www.bls.gov/ooh/education-training-and-library/career-and-technical-education-teachers.htm>

² <http://www3.ag.purdue.edu/USDA/employment/pages/default.aspx>

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This program will benefit career and technical education, each of which are priorities in South Dakota. Both the Critical Needs Teaching Scholarship³ and Dakota Corp Scholarship⁴ illustrate the pressing need for trained workers in these areas. This program will train more educators who will teach in these critical areas.

This degree program will also provide technical institutes an opportunity to expand the number and diversity of their own credits accepted by regental institutions. BOR Policy 2:25 states the regental system will recognize credits of courses provided the “Technical institute faculty have either a master’s degree in the subject/discipline being taught or any master’s degree typically with 18 graduate hours in the subject/discipline being taught.” With the addition of this Master’s degree more students enrolled at technical schools could matriculate into regental institutions with a greater number of recognized credits thereby bolstering student enrollment and, eventually, completion rates.

The proposed program will fill a void left by the discontinuation of the graduate program in Career and Technical Education. Currently, there are only 2 out of 80 agricultural education teachers who are masters prepared in the state.

South Dakota CES has roughly 85 employees with more than half of these positions requiring a Master’s degree. Many positions in CES from the county offices to the state staff have some type of an educational component required in their duties, such as youth or adult education. This program will allow CES employees to pursue professional growth opportunities while extending the mastery of their chosen field through prudent choice of elective courses but will also ensure students will master modern instructional methodologies and pedagogies to improve their instructional effectiveness. Three to six CES employees are projected to enroll each year.

Many of the instructors hired at the technical institutes in South Dakota and in our region have a significant amount of industry experience, but have limited to no experience as an instructor. Technical schools experience a very high turnover in positions due to the lack of educational experience their instructors have in educating students. Many of the instructors are seeking ways to become better educators along with the technical school administrators wanting their instructors to seek additional education to help them become better instructors.

Professionals in non-profit organizations in our region vary, but many of these professionals are seeking to advance themselves personally and professionally. This pool of potential students is significant.

The program will focus on recruiting in South Dakota and in the region. The National Association of Agricultural Educators (NAAE) will be used to help recruit potential candidates. NAAE is a national association of agricultural educators with more than 7,800 members.

³<https://www.sdbor.edu/students/documents/CriticalTeachingNeedsScholarshipApplication2014.pdf>

⁴<http://www.sdbor.edu/dakotacorps/welcome.htm>

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Members are involved in school-based agricultural education from middle school to postsecondary. List serves and publications will be utilized to recruit along with attendance at the National Association of Agricultural Educators annual meeting each year.

Recruitment for the extension and non-profit sector will focus on the midwest region, specifically, Minnesota, North Dakota, Nebraska, Wyoming, Montana and Iowa. The program will utilize the United States Department of Agriculture (USDA) Cooperative Extension System list serve and meeting venues to market this program.

2. Rationale

A. If a new degree is proposed, what is the rationale?

A new degree, the Master of Science in Agricultural Education, is proposed. The University currently does not offer a master's degree in Agricultural Education and this program will allow educators, extension professionals and others in the agricultural industry to pursue an advanced degree. South Dakota has recognized a critical need in this area.

B. What is the rationale for the curriculum?

No national examinations or instruments currently exist to measure individual student achievement education, thus traditional measures of student performance will be employed.

The curriculum is designed to conform to the requirements of the Graduate School at South Dakota State University. This master's degree program will require all students to pass 30 credits if a thesis is completed (Option A) or 32 credits if a Research Paper is completed (Option B). The thesis is a sustained intellectual endeavor over the course of multiple semesters which is incorporated into a final document approved by the student's supervisory committee. The Research Paper is much less in scope and typically completed in a single semester. Students may also complete an Option C, coursework only, program, which contains only didactic coursework. In all three instances, students will be required to pass formal didactic course work as well as defend their knowledge in the form of an oral examination administered by the supervisory committee.

C. Demonstrate that the curriculum is consistent with current national standards. Complete the tables below and explain any unusual aspects of the proposed curriculum.

All teacher education programs both undergraduate and graduate, at SDSU, are nationally accredited under the rigorous standards set forth by the Council for the Accreditation of Educator Preparation (CAEP). The Masters of Science in Agricultural Education will be aligned to the five standards of CAEP listed below.

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Standard 1: Content and Pedagogical Knowledge: The provider ensures that candidates develop a deep understanding of the critical concepts and principles of their discipline and, by completion, are able to use discipline-specific practices flexibly to advance the learning of all students toward attainment of college- and career-readiness standards.

Standard 2: Clinical Partnerships and Practice: The provider ensures that effective partnerships and high-quality clinical practice are central to preparation so that candidates develop the knowledge, skills, and professional dispositions necessary to demonstrate positive impact on all P-12 students' learning and development.

Standard 3: Candidate Quality, Recruitment, and Selectivity: The provider demonstrates that the quality of candidates is a continuing and purposeful part of its responsibility from recruitment, at admission, through the progression of courses and clinical experiences, and to decisions that completers are prepared to teach effectively and are recommended for certification. The provider demonstrates that development of candidate quality is the goal of educator preparation in all phases of the program.

Standard 4: Program Impact: The provider demonstrates the impact of its completers on P-12 student learning and development, classroom instruction, and schools, and the satisfaction of its completers with the relevance and effectiveness of their preparation.

Standard 5: Provider Quality Assurance and Continuous Improvement: The provider maintains a quality assurance system comprised of valid data from multiple measures, including evidence of candidates' and completers' positive impact on P-12 student learning and development. The provider supports continuous improvement that is sustained and evidence-based, and that evaluates the effectiveness of its completers. The provider uses the results of inquiry and data collection to establish priorities, enhance program elements and capacity, and test innovations to improve completers' impact on P-12 student learning and development.

Every seven years the program will have both a state and national accreditation review. The next review is scheduled for fall 2019. Fall 2019 will be the first time this program is part of the CAEP review. See timeline below for more information on the process and submission dates (section 7).

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D. Summary of the Degree

This program will include Option A- Thesis; Option B- Research Paper/Design Paper; and Option C- Coursework only.

Option A Outlined:

<i>Master of Science in Agricultural Education</i>	Credit Hours	Percent
Required courses, all students	15	50
AGED 798 Thesis	5-7	17-23
Electives	8-10	27-33
Total required for the degree	30	100

Option B Outlined:

<i>Master of Science in Agricultural Education</i>	Credit Hours	Percent
Required courses, all students	15	47
AGED 788 Research Prob in Agric Educ	3	9
Electives	14	44
Total required for the degree	32	100

Option C Outlined:

<i>Master of Science in Agricultural Education</i>	Credit Hours	Percent
Required courses, all students	15	41
Electives	21	59
Total required for the degree	36	100

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Required Courses --- for Option A/B/C

Prefix & Num	Course Title	Credit Hours	New (yes,no)
EDFN 745	Effective Teaching: Theory into Practice	3	No
AGED 610	Introduction to Research	3	Yes
EDFN 747	Curriculum: Theory into Practice	2	No
SEED 748	Secondary Practicum	1	No
EPSY 740	Advanced Educational Psychology	3	No
AGED 650	Foundations of Agricultural Education	3	Yes

Selected Elective Courses in Agricultural Education (AGED), Adult Higher Education (AHED), Education Foundations (EDFN), in the Program: Partial list of courses that may be taken as electives in the program. New courses are also indicated.

Prefix & Num	Course Title	Credit Hours	New (yes,no)
AGED 592	Topics	1-6	Yes
AHED 711	Assessment & Program Design	3	No
EDFN 751	Teaching Reading Across Disciplines	3	No
EDFN 725	Education in a Pluralistic Society	3	No
EDFN 730	Current Issues in Education	3	No
AHED 755	Principles of College Teaching	3	No
EDER 760	Informational Literacy	3	No
AGED 620	Curriculum for Agricultural Science Education (CASE)	3-5	Yes

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Elective Courses: Selected agricultural disciplines which may serve as electives. The number of courses and an abbreviated list of topics is provided for courses anticipated to be popular with students in this program. All 500-level courses in the university may serve as electives.

Course Prefix	Discipline	# of Potential Courses	Summary of Course Topics
AS	Animal Science	16	animal production, meat science, growth, nutrition, metabolism, etc
AST	Agriculture Systems Technology	2	Independent study, waste management
AGEC	Agricultural Economics	6	Farming and food systems mgt, ag marketing, farm/ranch mgt, resource economics
PS	Plant Science	34	many soil courses, crop breeding, crop production courses, entomology, virology, genetics, plant disease, etc
HO	Horticulture	4	vegetable and fruit crops, turfgrass,
DS	Dairy Science	9	lactation, dairy management, dairy product production, dairy microbiology, etc
NRM	Natural Resource Management	5	Ecosystems, landscape ecology, environmental toxicology
WL	Wildlife	19	Game ecology and mgt, aquatic ecology, fire ecology, wildlife nutrition, limnology, wetlands and stream ecology, aquatic invertebrates, fisheries ecology and mgt, natural resource policy and administration, etc.

All university courses taught at the 500-level and above are eligible for elective courses. However, courses in agriculture and related areas are anticipated to be preferred by these students. The above table indicates those disciplines anticipated to be popular with the students and the number of course available at the time of preparation of this document. A summary of some of the course topics is also provided indicating the extensive breadth of topics available. For a complete listing, please consult the SDSU Graduate School Catalog: <http://catalog.sdstate.edu/index.php?catoid=25>.

The Agricultural Education faculty will advise students to enroll in courses aligned with the professional aspirations of the student. Students who express aspirations to teach within or are currently teaching at a South Dakota technical institute in an area other than Agricultural Education will be advised to complete no fewer than 18 graduate credits in their chosen content

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area. In doing so, the instructor will be qualified to teach courses at technical institutes which will be available for articulation as a general education course to South Dakota regental institutions (SDBOR Policy 2:25). Similarly, students aspiring to teach Dual Credit and Dual Enrollment courses within South Dakota high schools will be advised to complete no fewer than 15 graduate credits (Dual Credit Administration Guidelines, AAC Agenda Item 5.B.3; February 2015). We anticipate these students will choose option C and place the 18 or 15 credits within the 21 credits available for electives. The research project or thesis option will still be available to these students however either of these choices may add credits to the degree program.

3. Student Outcomes & Demonstration of Individual Achievement

A. What specific knowledge and competencies, including technology competencies, will all students demonstrate be able to demonstrate before graduation? Complete Appendix A – Outcomes using the system form.

1. Demonstrate an understanding of professionalism and work ethically in the pursuit of truth, accuracy and fairness.
2. Demonstrate the ability to think critically, creatively and independently.
3. Communicate technical information, both orally and in writing, in an effective manner.
4. Conduct research and evaluate information by methods appropriate for the profession in which they work.
5. Demonstrate an understanding of diversity such as gender, race, ethnicity, and other forms of cultures.

B. What national instruments (examinations) are available to measure individual student achievement in this field?

None.

C. How will mastery by individual students be demonstrated? Describe the specific examinations or processes to be used. This is to include external measures.⁵ What will be the consequences for students who do not demonstrate mastery?

Mastery will be demonstrated through assessment of the student learning outcomes for those courses included in Appendix A. Upon completion, students will have demonstrated mastery through written tests, oral presentations, written papers, and programming projects. This assessment method is implicitly external, that is, based on standards of faculty members trained at other universities.

Additionally mastery will be reviewed and verified using the student's supervisory committee. This committee is composed of no fewer than two graduate faculty members expert in the content area of the degree program. Additionally, a graduate faculty member,

⁵ What national examination, externally evaluated portfolio or student activity, etc will be used to verify that individuals have attained a high level of competence and identify those who need additional work?

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exterior to the subject field, is appointed by the Graduate School who serves as an advocate for the student and ensures the rules of the Graduate School are upheld. This committee supervises the student's progress through the program providing guidance as necessary. If the student is preparing a thesis, a more intensive oversight of the student's activities is undertaken.

All student's will be required to pass a comprehensive, oral examination over the core courses and thesis/research topic (if applicable.) In accordance with SDSU Graduate School policy, students who fail to meet minimum performance standards on their first attempt are generally given a second chance to demonstrate mastery. However, students who fail to pass the comprehensive exam are provided a second opportunity, with proper guidance to ensure all students are provided the greatest likelihood of success.

4. What instructional approaches and technologies will be used to teach courses in the program? *This refers to the instructional technologies used to teach courses and NOT the technology applications students are expected to learn.*

All courses are delivered via the SDBOR learning management system, Desire2Learn. Instruction includes content delivered via online video, weekly use of the discussion board in D2L, colleague critiques through Web 2.0 tools and other applications available in the SDSU Active Learning Cloud.

5. Did the University engage any developmental consultants⁶ to assist with the development of the curriculum? Were any professional or accrediting associations consulted during the development of the curriculum? What were the contributions of the consultants and associations to the development of curriculum? See also section 11 below.

The universities did not engage any consultants to assist with the development of the curriculum. Numerous discussions among faculty and administrators took place over the past year and those discussions clearly shaped the proposed degree programs. Curriculum from other programs were also reviewed.

6. Are students in the program expected to be new to the university, redirected from other programs or both? Complete the table and explain how the estimates were developed.

The University requests authorization to deliver the degree program online to accommodate students who are not able to relocate to Brookings.

Masters of Science in Agricultural Education	Fiscal Years*			
	1st	2nd	3rd	4th

⁶ Developmental consultants are experts in the discipline are hired by the university to assist with the development of a new program (content, courses, experiences, etc). Universities are encouraged to discuss the selection of developmental consultants with Board staff. See section 11 below.

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Estimates	FY 15	FY16	FY17	FY18
Students new to the university	5	6	7	9
Students from other university programs	-	1	2	3
= Total students in the program (fall)	5	12	16	22
Program credit hours (major courses)**	80	176	208	240
Graduates	0	5	6	7

* Do not include current fiscal year.

** This is the total number of credit hours generated by students in the program in the required or elective program courses. The same numbers are used in Appendix B – Budget.

7. If program accreditation is available, identify the organization and explain whether accreditation is required or optional, the resources required, and the University’s plans concerning the accreditation of this program.

The AgEd masters program will be included in the CAEP accreditation process. While there may be a small population of students in this program that are not classroom teachers, according to CAEP accreditation guidelines, if 50% or more of the students in any program option have an impact on P-16 learners, the program will be included in the accreditation process. The State of South Dakota has a partnership with CAEP where programs are reviewed first at the State level, then at the national level. The South Dakota Department of Education will review programs for accreditation at the state level in April 2018. The onsite CAEP accreditation review will occur in December 2018.

8. Does the University request any exceptions to any Board policy for this program? Explain any requests for exceptions to Board Policy. If no exceptions are requested, enter “None.”

None.

9. Program Delivery

A. Does the University request authorization to deliver this entire program at any off-campus locations? If yes, list location(s) and intended start date(s).

No.

B. Does the University request authorization to deliver this entire program by distance technology? If yes, identify delivery method(s) and intended start date(s).

Yes. The University requests authorization to deliver this program online.

C. Include off-campus tuition and site or delivery costs in the next section and in Appendix B. If off-campus or distance delivery authorization is not requested, enter “None.”

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None

10. Costs, Budget and Resources

A. Explain the amount and source(s) of any one-time and continuing investments in personnel, professional development, release time, time redirected from other assignments, instructional technology & software, other O&M, facilities, etc needed to implement the proposed program. Address off-campus or distance delivery separately.

A program budget is provided as Appendix B.

The university does not request any new State resources, additional student fees/charges, or additional facilities to develop, implement or maintain the proposed program. Dr. Scott Smalley will be assigned to coordinate and teach within this program. It is his salary and benefits that are noted as the FTE faculty on the attached budget form. Some of Dr. Smalley's current workload will be reallocated to other faculty within the department and partially to a new hire that will be made within our secondary education staff. This hire is the result of a current faculty resignation and therefore does not require additional resources. Reallocation of resources can be made toward the Agricultural Education program as it is one that is growing and demonstrates a need for an increase in workload assignment.

The proposed Agricultural Education degree also draws from our existing graduate programs in Educational Administration and Curriculum and Instruction, and can thus utilize the expertise of additional graduate faculty within the department.

11. Board Policy 2:1: *“Proposals for new graduate programs shall be evaluated by independent consultants retained by the Board.”* Provide the names, telephone numbers, and URLs of professional organizations, accrediting bodies, and journals (editors) who may be able to assist the Board staff with the identification of consultants.

Journal of Agricultural Education, Barry Groom email: dbcroom@ncsu.edu
<http://www.jae-online.org/>

12. Additional Information.

Admission Requirements

Applicants will be required to meet admission criteria for admission into the SDSU Graduate School. This includes: payment of the application fee, submission of official transcripts from undergraduate and graduate coursework, and completion of a bachelor's degree. International students must meet English proficiency standards as determined by the Graduate School.

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The program will also recommend the following for evaluation for admission: resume, goal statement, and two professional letters of reference.

Appendix A Individual Student Outcomes and Program Courses

List specific individual student outcomes—knowledge and competencies—in each row. Label each column with a course prefix and number. Indicate required courses with an asterisk (*). Indicate with an X the courses that will provide the student with an opportunity to acquire the knowledge or competency listed in the row. All students should acquire the program knowledge and competencies regardless of the electives selected. Modify the table as necessary to provide the requested information for the proposed program.

Individual Student Outcome (Same as in the text of the proposal)	*Required Courses that Address the Outcomes					
	*EDFN 745	*AGED 610	*EDFN 747	*SEED 748	*EPSY 740	*AGED 650
Demonstrate an understanding of professionalism and work ethically in the pursuit of truth, accuracy and fairness.	X		X			X
Demonstrate the ability to think critically , creatively and independently.	X	X	X		X	
Communicate technical information, both orally and in writing, in an effective manner.	X			X		X
Conduct research and evaluate information by methods appropriate for the profession in which they work.		X			X	X
Demonstrate an understanding of diversity through gender, race, ethnicity, and other forms of cultures.	X		X		X	

Expand the table as necessary to include all student outcomes. Outcomes in this table are to be the same ones identified in the text.

Appendix B
Budget & Resources

South Dakota State University, Master of Science, Agriculture Education

1. Assumptions

		1st FY15	2nd FY16	3rd FY17	4th FY18
<i>Headcount & hours from proposal</i>					
Fall headcount (see table in proposal)					
Program FY cr hrs, State-Support		5	11	13	15
Program FY cr hrs, Self-Support		0	0	0	0
		80	176	208	240
Faculty, Regular FTE	See p. 2	1.00	1.00	1.00	1.00
Faculty Salary & Benefits, average	See p. 2	\$81,233	\$81,233	\$81,233	\$81,233
Faculty, Adjunct - number of courses	See p. 2	0	0	0	0
Faculty, Adjunct - per course	See p. 2		\$0	\$0	\$0
Other FTE (see next page)	See p. 2	0.00	0.00	0.00	0.00
Other Salary & Benefits, average	See p. 2	\$8,622	\$8,622	\$8,622	\$8,622

2. Budget

<i>Salary & Benefits</i>					
Faculty, Regular		\$81,233	\$81,233	\$81,233	\$81,233
Faculty, Adjunct (rate x number of courses)		\$0	\$0	\$0	\$0
Other FTE		\$0	\$0	\$0	\$0
S&B Subtotal		\$81,233	\$81,233	\$81,233	\$81,233
<i>Operating Expenses</i>					
Travel		\$0	\$0	\$0	\$0
Contractual Services		\$0	\$0	\$0	\$0
Supplies & materials		\$500	\$500	\$500	\$500
Capital equipment		\$0	\$0	\$0	\$0
OE Subtotal		\$500	\$500	\$500	\$500
Total		\$81,733	\$81,733	\$81,733	\$81,733

3. Program Resources

SELF-support tuition/hr, net of HEF	GR	\$388.25	\$388.25	\$388.25	\$388.25
Self-support tuition revenue	hrs x amt	\$31,060	\$68,332	\$80,756	\$93,180
STATE-support tuition/hr, net of HEFF	GR	\$161.48	\$161.48	\$161.48	\$161.48
State-support tuition revenue	hrs x amt	\$0	\$0	\$0	\$0
Program fee, per cr hr (if any)	\$0.00	\$0	\$0	\$0	\$0
Delivery fee, per cr hr (if any)	\$0.00	\$0	\$0	\$0	\$0
University redirections		\$0	\$0	\$0	\$0
Community/Employers		\$0	\$0	\$0	\$0
Grants/Donations/Other		\$0	\$0	\$0	\$0
Total Resources		\$31,060	\$68,332	\$80,756	\$93,180

Resources Over (Under) Budget

(\$50,673) (\$13,401) (\$977) \$11,447

Provide a summary of the program costs and resources in the new program proposal.

Estimated Salary & Benefits per FTE	Faculty	Other
Estimated salary (average) - explain below	\$63,566	\$0
University's variable benefits rate (see below)	0.1423	0.1423
Variable benefits	\$9,045	\$0
Health insurance/FTE, FY13	\$8,622	\$8,622
<i>Average S&B</i>	\$81,233	\$8,622

Appendix B
Budget & Resources

South Dakota State University, Master of Science, Agriculture Education

Explain faculty used to develop the average salary & fiscal year salaries used. Enter amount above.

Dr. Smalley will teach primarily within this program thus his salary is expected to be generated by this program for the first year. Additional graduate faculty will contribute to the program through the use of existing courses. A new faculty hire, brought about by the resignation of a current secondary education faculty member, will be allocated to absorb part of what Dr. Smalley is currently teaching. This allows his workload to be shifted primarily toward the graduate program. The University is prepared to subsidize this program for the first 3 years to ensure this program is funded.

Explain adjunct faculty costs used in table:

Explain other [for example, CSA or exempt] salary & benefits. Enter amount above.

Only faculty salaries are included in this budget.

Summarize the operating expenses shown in the table:

We estimate \$500 for general office supplies, copying, mailings, recruitment materials and internet connections.

Summarize resources available to support the new program (redirection, donations, grants, etc).

Monies to subsidize the program will be provided by College of Education and Human Sciences and the Department of Teaching Learning and Leadership will subsidize the program for years 1-3.

State-support: Change cell on page 1 to use the UG or GR net amount.

Self-Support Tuition, HEFF & Net	FY15 Rate	HEFF	Net
Undergraduate	\$312.90	\$26.60	\$286.30
Undergraduate-UC Foundations	\$414.85	\$26.60	\$388.25
Graduate	\$414.85	\$26.60	\$388.25
Externally Supported	\$40.00		

State-support: Change cell on page 1 to use the UG or GR net amount for your university.

State-Support Tuition, HEFF & Net	FY15 Rate	HEFF	Net
Undergraduate - BHSU, DSU, NSU	\$133.10	\$26.62	\$106.48
Undergraduate - SDSMT, SDSU, USD	\$138.80	\$27.76	\$111.04
Graduate - BHSU, DSU, NSU	\$201.85	\$40.37	\$161.48
Graduate - SDSMT, SDSU, USD	\$210.40	\$42.08	\$168.32

Variable Benefits Rates

University	FY15
BHSU	14.23%
DSU	13.85%
NSU	13.92%
SDSM&T	13.89%
SDSU	14.04%
USD	13.90%

Response to Reviewers Comments
Proposed Master's Degree in Agricultural Education
South Dakota State University
Spring 2015

Thank you for the comments and suggestions as we move the Masters of Science in Agricultural Education program forward. Included below is an explanation and additional information regarding the questions raised in the program review of the proposed Master's program in Agricultural Education.

1. CEAP Standard 1:1 will be addressed by offering a significant number of agricultural content courses. Courses that may be considered as potential electives in this program include: Agricultural Education, Animal Science, Plant Science, Horticulture, Agricultural Systems Technology, Dairy Science, Agricultural Economics, Natural Resource Management and Wildlife and Fisheries. Elective choices are more clearly defined and discussed on p.8 in D. Summary of the program. Promotional materials will also make clear agricultural content courses are electives within the program.
2. The reviewer is concerned the items outlined in the Venn Diagram: 3 Circle Model of Agricultural Education (Classroom, FFA, and Supervised agricultural experience (SAE)) may not be sufficiently covered in the curriculum. In agricultural education all three components are essential to have a complete high school agricultural education program and these areas will be integrated and covered within AGED 650, Foundations of Agricultural Education.
3. The reviewer is concerned about access of students to information regarding special needs students and educational technology. EDFN 700 Exceptional Learners and EDFN 750 Educational Technology are available for students in this program and serve as electives within the degree program. Students will be encouraged to take these courses on a case-by-case basis determined in discussions with their advisor.
4. The reviewer is concerned the required course, SEED 748 Secondary Practicum, may not be suitable for all students. This course allows flexibility in the type of setting in which students are able to complete their practicum and is customized to meet their professional needs. For example, a student in the Extension area might allow a student to complete the practicum in a 4-H or workshop setting. Thus, the course is designed to allow for the practicum to be flexible and will accommodate the needs of all students.
5. The reviewer also raises concerns whether the program will sufficiently support matriculating students who will, or strive to, teach at technical colleges. SDSU will ensure all students are advised in alignment with BOR policy and guidelines as well as the student's professional aspirations. Specifically, should the student anticipate teaching at a South Dakota technical college, faculty will advise to complete no fewer than 18 graduate credit hours within the teaching discipline (SDBOR 2:25). Similarly, should the student anticipate teaching in the High School Dual Credit and Dual Enrollment program, the student will be advised to complete no fewer than 15 graduate hours within the teaching discipline (Dual Credit Administration Guidelines, AAC Agenda Item 5.B.3; February 2015). Adherence to these policies and guidelines will allow the graduating student to act as instructor of record for courses which will transfer to regental institutions in partial fulfillment of an undergraduate degree. The proposal has been modified to directly address this concern: p8-9 in D. Summary of the Degree.
6. We are in the final stages of hiring a second faculty member in agricultural education. A hiring proposal has been submitted to Human Resources at SDSU. We expect to have a candidate hired for fall of 2015.

7. Ag IDEA has been thoroughly explored as a way to deliver the graduate program; but financially for many of our educators, this is not a viable option. In the future, we might consider AGIDEA as an opportunity to offer some courses to students.

Thank you for the suggestions and recommendations by our external reviewer, Dr. Gary Moore, regarding the Masters in Agricultural Education program. We feel the two major areas of concern in the proposal were the need to hire an agricultural education faculty member and ensuring enough agricultural content courses are available for prospective students. We believe both of these concerns have been addressed fully.

Report to the South Dakota Board of Regents
Proposed Master's Degree in Agricultural Education
South Dakota State University

Prepared by Gary Moore
Director of Graduate Programs, Department of Agricultural and Extension Education
North Carolina State University
Past President, American Association for Agricultural Education
February 13, 2015

The guidelines for this report asks that five topics be addressed. I will do so but will add one additional section – Need for the Program which will be addressed first.

Need for the Program: The documentation provided in the report does a sound job of building a rationale for the program. While it is realized that South Dakota is not a densely populated state, the citizens deserve to have a highly educated group of individuals providing agricultural education services to the students and other stakeholders in the state. With 80 agriculture teachers, 85 extension personnel, technical college instructors, non-profit groups serving youth, and other businesses and industries that need employees with this type of education, there is a need for the program.

Furthermore, there appears to be an “agricultural education” vacuum at the graduate level in the upper Midwest; so there is potential for this program to cross state lines. The status of graduate education in Agricultural Education at North Dakota State is unclear. Wyoming does not have a graduate program. The Minnesota program is not online. I am not aware of any online initiatives at Michigan State, Wisconsin, Washington State or Nebraska. Iowa State does have an online program as does Montana State. So there is room for SDSU to be a provider of graduate education in the upper part of the U.S.

Program Curriculum: I have more questions about the proposed curriculum than any other part of the proposal. In the charge letter for this review, a number of questions were posed. I will raise my concerns as I address those questions.

Does the proposed program meet accreditation requirements where applicable?

The proposed program probably does meet accreditation requirements but it is not crystal clear from the documentation provided. Since this program is, at the core, an advanced teacher education program (CIP code 13.1301) and is located within the College of Education and Human Sciences (Department of Teaching, Learning and Leadership), the accrediting agency is CAEP - Council for the Accreditation of Educator Preparation. Up until recently NCATE – the National Council for Accreditation of Teacher Education was the accrediting agency. CAEP came into existence in 2013 by merging NCATE with TEAC (Teacher Education Accreditation Council). Since this is a recent change, few institutions have experienced a CAEP review; thus it is not clear how the new accreditation process will work or how the standards will be interpreted.

There are five CAEP standards for advanced programs. CAEP Standard 1 focuses on content and pedagogical knowledge. There are five components to this standard. It is very clear that the program is steeped in pedagogical knowledge and meets the majority of these sub-components. But one might question whether Standard 1.1 is adequately addressed. Standard 1.1 states “Advanced program candidates demonstrate an understanding and are able to apply knowledge

and skills specific to their discipline.” In the listing of required and elective courses there are no courses in agriculture, which is the discipline, listed. There are numerous courses in education listed as electives but none in agriculture. However there is a footnote (in small type) indicating that “Additional courses in the area of technical expertise are also available as elective courses.” This statement may cover the discipline knowledge expected by CAEP, but it would be easy to miss the footnote if the promotional material and documents available to the student is presented in the same manner.

My interpretation of what is written in the proposal is that no advanced courses in agriculture are required or explicated expected as elective courses. Will this meet the intent of CAEP Standard 1.1?

Throughout the documentation it is stated that this is a joint program between the College of Education and Human Sciences and the College of Agriculture and Sciences. During the on-site visit there was no pre-planned provision for meeting with a representative of the College of Agriculture and Biological Sciences. Thus one could ask about the involvement of the College of Agriculture and Biological Sciences in the development of this proposal.

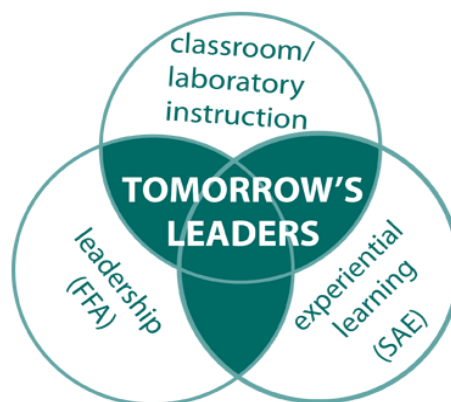
However, a meeting with the Associate Dean in the College of Agriculture and Biological Sciences was scheduled when I arrived on campus and inquired. The Associate Dean does have knowledge of the proposal and is in support of the program.

Does the proposed program meet or exceed current national standards and expectations for the discipline?

There are currently no national standards for graduate programs in Agricultural Education. The National Council for Agricultural Education has voluntary program standards for secondary agricultural education. They are contained in the National Quality Program Standards for Secondary (Grades 9-12) Agricultural Education. However, there are no standards for graduate programs.

Will the proposed program provide students with sound preparation for their careers and serve them well as they seek employment?

If the primary audience for this degree are agriculture teachers one might ask does this curriculum prepare them for the expectations of their job. The Agricultural Education model that is widely embraced in the profession shows a Venn diagram with 3 overlapping circles. One circle is instruction, one is experiential learning (commonly known as SAE), and the third is leadership development (which is a euphemism for FFA or youth development). How does the proposed model support these three important components of agricultural education? It appears there is a major emphasis on classroom



instruction. In 2010-11 the list of courses at SDSU listed AGED 707 - Supervised Occupational Experiences and Student Groups. I don't know what happened to this course but a question could be raised as to whether there is a need for such a course in the proposed curriculum. Agriculture teachers are a pragmatic group and want practical, applied courses that can help them on the job. While learning theory and general principles are acceptable, there needs to be a balance between pedagogical courses and technical agriculture courses.

Agriculture teachers often indicate they need additional preparation in working with special needs students and in using teaching technologies. Should consideration be given to including EDFN 750 Educational Technology and EDFN 700 Exceptional Learners to the list of electives? If extension agents are in the program a course in adult education might be appropriate. At one time there was a course AGED 706 - Adult Education in Agriculture on the books.

The proposal indicates that the target audience includes extension personnel, technical college instructors and other individuals outside of secondary schools in addition to secondary agriculture teachers. It is possible that these individuals could outnumber the secondary teachers. One of the required courses in the proposed program is SEED 748 Secondary Practicum. I am sure this was included to meet CAEP Standard 2 but do the non-secondary teachers really have to do this "Secondary" practicum or will appropriate modifications be made to accommodate these students?

The proposal (page 3, 1st paragraph) indicates this would be a boon to technical institutions because the instructors would have Master's degree and thus the courses would be more transferable to a 4 year institution. The BOR Policy 2.25 states that the instructors would need to have "... 18 graduate hours in the subject/discipline being taught." Does the proposed graduate program in agricultural education include 18 graduate hours in agriculture for these potential students? That is not clear.

What changes, if any, do you recommend?

My main recommendation would be to consider the questions that have been raised above. There needs to be a visible agriculture component in the program since this is a degree in agricultural education.

Faculty:

Will the current and planned faculty be sufficient to offer a strong program?

Overall, the current faculty involved in the program appear to be competent professionals. They should be able to effectively teach the courses listed in the proposal. However, only one of these individuals has experience and training in agricultural education. This person appears to be the lead individual for the program. This individual is also responsible for the undergraduate program which has 80 students. Given the fact that the proposal calls for the development of four new graduate courses in agricultural education and the lead person is an untenured assistant professor, this could be a challenge. The proposal mentions that a 2nd person will be hired in the fall of 2015. This will be necessary to have a viable program. During the visit it was

verified that there is an active search for a 2nd faculty member in agricultural education. This assuages my concern.

What additional expertise is needed to implement the program at a high level of quality?

If SDSU wants a high quality Agricultural Education graduate program they should seriously consider affiliating with the Great Plains Ag*Idea group at some point in time. SDSU is already a member of a number of Great Plains programs. There is a graduate agricultural education group in Great Plains. The universities involved in the agricultural education graduate program consortia include the University of Arkansas, California State University – Chico, Clemson University, Kansas State University, University of Missouri, Montana State University, North Carolina State University, Oklahoma State University, and Texas Tech University. Ohio State University is in the process of joining the consortium. These universities share graduate courses. Chico has only one agricultural education professor and this is the only way they could feasibly offer a Master's program. Some of the top agricultural education professors in the nation teach graduate courses through the Ag*Idea program; thus students get to work with the national leaders in the field.

During the visit it was made clear that the major impediment to joining Ag*Idea was the cost. The tuition for Ag*Idea courses is substantially higher than in-state tuition. This is a valid concern. After the program is established and starts to attract out-of-state students, the faculty might want to revisit this decision. The cost between out-of-state tuition and the Ag*Idea tuition is similar. It has been my experience there are times when a student is willing to pay the higher tuition; especially if the home institution is not offering a course needed for graduation or to speed up the time line for a student to graduate. Also, some students who are considering a doctoral program in the future might want to take courses from some of the established leaders of the profession.

Will the teaching, research, service expectations and related resources be competitive when recruiting new faculty to staff the program?

To the best of my knowledge, yes.

Facilities, Equipment and Services

Does the university have the facilities and equipment needed offer an excellent program?

Yes

Are library resources, information technology, and other services sufficient to support a high quality program?

Yes

Other Issues:

Are there other issues (e.g., student recruitment, program management, degree title, support staff, etc.) that should be given attention?

No. As a point of information some universities that have graduate programs that focus on agricultural teachers and extension educators have chosen to use the CIP classification of 010801 "Agricultural and Extension Education Services and name their program "Agricultural and Extension Education." The rationale for this is that agriculture teachers and extension agents often switch jobs. This name seems to work better for those individuals. And in some states "agriculture" programs are funded at a higher level than "education" programs by the state legislature.

Summary Recommendations:

What do you see as the strengths and weaknesses of the proposed program?

Strengths

- There is a need for the program
- This proposal has the support of the university administration and they are willing to provide resources to support the program.
- There is an adequate group of faculty to support the program.
- Facilities and infrastructure are good.

Weaknesses

- The proposed curriculum needs closer examination and some tweaking. Special attention needs to be given to making the agriculture courses more visible. The current proposal looks more like a Master's degree in Curriculum and Instruction than in Agricultural Education.
- Having only one faculty person with expertise in the field of agricultural education is a concern but is not out of the ordinary in this part of the country. The hiring of a 2nd faculty member will alleviate this concern.

What broader recommendation do you have for the University and the Board?

This program has the potential to be a quality program and serve not only South Dakota but the surrounding states.