



COMMISSION ON
TEACHER CREDENTIALING
Ensuring Educator Excellence

**Commission on Teacher Credentialing
Biennial Report**
(For Institutions in the Yellow, Blue, and Violet Cohort Due Summer/Fall 2012)
Academic Years 2010-11 and 2011-12

Institution	California State University, Fresno
Date report is submitted	July 31, 2012
Program documented in this report	Agriculture Specialist
Name of Program	Agriculture Specialist
Please identify all delivery options through which this program is offered (Traditional, Intern, Other)	Traditional and Intern
Credential awarded	Agriculture Specialist
Is this program offered at more than one site? No	
If yes, list all sites at which the program is offered	
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California State University, Fresno (10-12)
Section A-I
Contextual Information

Agriculture Specialist

California State University, Fresno is one of 23 universities in the California State University system. Fresno State began as a normal school in 1911 and has a strong history of service and preparation of education professionals. Fresno State's last joint visit (NCATE/CCTC) was in March 2006. The Dean of the Kremen School of Education and Human Development is the Unit Head that oversees 16 programs.

The Agriculture Specialist Credential Program at California State University, Fresno is provided in conjunction with the Single Subject in Agriculture Program through a cooperative arrangement between the Kremen School of Education and Human Development and the Jordan College of Agricultural Sciences and Technology (JCAST). At California State University, Fresno, the Agricultural Education Degree Program and the Agriculture Specialist Credential Program are components of the Animal Sciences and Agricultural Education Department. This department is part of the JCAST.

The Agriculture Specialist Credential Program at California State University, Fresno is a five-year program. Students must first obtain the Bachelor of Science Degree with a major in Agricultural Education. To complete the degree, students must complete 39 semester units of agriculture core subject matter. In addition they must also complete a specialization area comprised of 15 semester units from one of the following areas:

Agricultural Business
Agricultural Engineering Technology
Animal Sciences
Plant Science

In addition to the specialization area, candidates for admission to the credential program must also complete 12 semester units of agricultural education courses and three units of early field experience prior to admission to the Agriculture Specialist Credential Program. These courses include an introductory course, organization, administration, and supervision of agricultural education programs, education in agricultural mechanics, and agricultural resources and computer applications.

The post-baccalaureate (fifth-year) program for agricultural education teacher preparation is structured so candidates, with a combination of undergraduate and graduate professional education coursework, will concurrently fulfill the requirements for the Single Subject in Agriculture and Agriculture Specialist Credentials by taking a sequence of 39 semester units of post-baccalaureate courses.

Subject matter competence and knowledge are documented through completion of the undergraduate preparation program and verification of 3,000 clock hours of occupational

experience. Candidates complete a form, (T-14), listing their education and leadership records along with their occupational experience. They also complete a personal interview with a staff member of the California Department of Education Agricultural Education Unit and provide this individual with a copy of their completed form. The form and interview must be completed prior to enrolling in the final field experience course.

At the post-baccalaureate level, candidates are enrolled in foundations, content instruction, psychology, and methods and materials courses. In addition, candidates are enrolled in a field experience course (EHD 155A, 4 units) during the first semester of their graduate program. Second semester candidates are enrolled in an additional field experience course (EHD 155B, 10 units) and spend one high school semester student teaching at an approved cooperating school. Interns are required to complete two semesters of EHD 155B (5 units each semester). During their final semester candidates are also enrolled in two graduate courses that require them to research and/or apply specific knowledge and skills to problems and issues arising during their final field experience.

The teaching methods course (CI 161) is taught by an agricultural education faculty member and is part of both the Single Subject in Agriculture and Agriculture Specialist Credential Programs. The same is true of the field experience classes. The preferred sequence of courses and activities in the Agriculture Specialist Credential Program are outlined on the “Agriculture Specialist Checklist”. This sequence document outlines the design and content of the specialist program and is provided to all students in the “Introduction to Agricultural Education” course.

From the fall 2010 semester through the spring 2012 semester 26 candidates were enrolled in the Agriculture Specialist Credential Program and 20 completed the program during this time period. During this time period one candidate chose not to enroll in final student teaching after completing initial student teaching and one candidate received an incomplete in final student teaching for failure to complete all required assignments. Two candidates received no credit for final student teaching and were offered an opportunity to enroll again but these two candidates chose not to complete the agriculture specialist credential program. Table 1 below indicates the number of candidates by semester.

Table 1. Agriculture Specialist Enrollment and Completers by Semester 2008-2010

Semester	Initial Student Teachers	Final Student Teachers	Interns*	Completers
Fall 2010	5	3	0	3
Spring 2011	3	5	0	4
Fall 2011	12	3	0	2
Spring 2012	6	12	0	11
Totals	26	23	0	20

*Interns complete two semesters of final student teaching.

Changes since Commission Approval of Current Program Document

Date

- An exit survey was adopted by the unit to be implemented for advanced credential programs.

2008

- Employer survey was reviewed and a unit-wide survey recommended 2008
- A proposal for an Agricultural Education early field experience course was developed and submitted to college and university curriculum committees. 2008
- The Agricultural Education Early Field Experience Course was approved and has been taught since the fall semester of 2009. 2009
- The Agricultural Education Student Outcomes Assessment Plan was revised and another graduate and employer survey was conducted during the 2011-2012 academic year. 2012

California State University, Fresno (10-12)
Section A-II
Candidate Assessment/Performance & Program Effectiveness Information

Agriculture Specialist

A. Candidate Key Assessments:

1. Portfolio – During the final semester of the credential program each candidate prepares a professional portfolio that includes a letter of introduction, philosophy statement, resume, reference letters, sample lesson plan, PowerPoint handout, and photos documenting candidate accomplishments. Portfolios are evaluated and scored by the Agriculture Specialist program coordinator and if weaknesses are noted candidates are assisted in strengthening their portfolio. Candidates are scored by the university supervisor and must score a two or higher on a four point scale to document competency for the portfolio requirement.
2. Occupational Experience (T-14 Form) – During the semester the candidate is enrolled in the initial field experience course they complete this form listing their education, leadership, and occupational experience. Candidates self-rate their level of knowledge in various agricultural areas on a three point scale and conduct a personal interview with the California Department of Education Regional Supervisor. The regional supervisor verifies each candidate's occupational experience and signs the form which is placed in the candidate's file. Candidates are informed of this requirement when they first enroll in the undergraduate program and those needing additional experience are advised about agricultural positions available including those on the University Agricultural Laboratory. Candidates must meet this requirement prior to enrolling in the final field experience course.
3. Agriculture Specialist Exit Evaluation of Objectives – At the completion of the final field experience course candidates submit a document to the university supervisor that is verified by the cooperating master teacher indicating the number of Agriculture Specialist Professional Objectives met by the candidate. This evaluation document was developed by a panel of experts consisting of university supervisors and cooperating master teachers. The panel identified eleven areas in which candidates are to document professional competency. Candidates indicate the date the activities for each competency are met and the cooperating master teacher signs the document to verify the activities were completed. These eleven areas are consolidated into six broad categories for data reporting purposes.
4. AGRI 281 Project – During the semester the candidate is enrolled in the final field experience course they are required to identify and research and/or apply specific knowledge and skills to an agricultural education problem or issue. This project is to be designed to benefit the school and/or community in which they are student teaching. Candidates submit a proposal to the university supervisor and cooperating master teacher for approval. Once approval is received, the candidate conducts the project and submits a written report that describes the project including objectives, methods and procedures, project requirements, outcomes, and benefit to the school/community. Scores on the project are assigned by the university supervisor and are documented on a database.

Summary of Data:

Table 2 provides information on candidates' scores on the Portfolio requirement for the Agriculture Specialist Program from fall 2010 through spring 2012. Portfolios are scored at the completion of the candidates' final semester in the credential program.

Table 2. Summary of Candidates' Portfolio Mean Scores and Pass Rate by Semester

Semester	Number Candidates	Mean Score*	Percent Passed
Fall 2010	3	3.33	100
Spring 2011	5	3.80	100
Fall 2011	3	3.50	67
Spring 2012	12	4.00	92

* Scores are based on a four point scale, with 2.0 or higher required for proficiency.

Table 3 contains information on the number of clock hours of occupational experience attained by Agriculture Specialist Candidates. Occupational experience is verified by a State Department of Education Regional Supervisor prior to admission to the final field experience.

Table 3. Summary of Candidates' Hours of Occupational Experience by Semester

Semester	Number Candidates	Clock Hours Range*	Clock Hours Mean
Fall 2010	3	3,021 – 37,080	15,487
Spring 2011	5	3,270 – 32,700	12,577
Fall 2011	3	4,000 – 40,680	16,377
Spring 2012	12	3,000 – 66,070	17,709

* A minimum of 3,000 clock hours required for proficiency.

Table 4 provides summary data on candidates' professional competence as assessed on the Agriculture Specialist Exit Evaluation of Objectives instrument. Professional competencies are verified by the cooperating master teacher during the candidate's final field experience. To successfully complete all activities, the candidate would have completed 14 activities for Curriculum, 8 for Management, 6 for Guidance, 4 for Public Relations, 3 for FFA, and 5 for Coordination.

Table 4. Summary of Mean Number of Professional Objectives Completed by Semester

Semester	Curriculum/ Instruction	Management	Guidance	Public Relations	FFA	Coordination
Fall 2010	14.0	8.0	6.0	4.0	2.5	5.0
Spring 2011	14.0	8.0	6.0	4.0	3.0	5.0
Fall 2011	14.0	8.0	6.0	4.0	3.0	5.0
Spring 2012	13.7	6.5	5.7	3.0	2.8	4.3

Table 5 lists mean scores by semester for student projects completed during the final semester of the credential program. Projects are scored at the completion of the candidates' final semester in the credential program.

Table 5. Summary of Candidates' AGRI 281 Mean Scores and Pass Rate by Semester

Semester	Number Candidates	Mean Score*	Percent Passed
Fall 2010	3	4.00	100
Spring 2011	5	4.00	100
Fall 2011	3	3.50	67
Spring 2012	12	3.67	92

* Scores based on a four point scale, with 2.0 or higher required for proficiency.

B. Addition information collected on completer performance and program effectiveness:

1. Employer Survey – Every three to five years employers are surveyed to determine their perceptions of the level of preparedness of new teachers from the Agriculture Teacher Preparation Program. This data is summarized and presented to the Agricultural Education Program Advisory Committee to assist the committee in making recommendations for program improvement.
2. Graduate Survey – Every three to five years program completers are surveyed to determine their perceptions of the level of preparedness for teaching agriculture. This data is also summarized and presented to the Agricultural Education Program Advisory Committee to assist the committee in making recommendations for program improvement.
3. Fresno Assessment of Student Teachers (FAST) – Information is also reviewed from the FAST projects that Agriculture Specialist Candidates are also completing. For example, the Holistic Proficiency Project, which assesses the candidate's ability to perform, document, and reflect upon teaching responsibilities over an entire semester, often indicates performance in some of the areas unique to the agriculture specialist program. Examples include making supervised agricultural experience visits and teaching leadership components of the agricultural education program. These areas match up with student engagement, learning about students (TPE 5 & 8), and specific pedagogical skills for teaching lessons that meet the California Agriculture Standards (TPE 1). Scores on this assessment are assigned using rubrics and are recorded electronically, currently on TaskStream by the university supervisor. Additional documentation for the agriculture specialist program is provided by weekly reports each candidate submits to the university supervisor.

Summary of Data:

Agriculture Specialist Graduate Employer Follow-up Survey Spring 2012:
Preparation Scale (Table 6)

The purpose of this scale was to measure administrators' perceptions of the level of preparation possessed by "New Teachers" from the Agriculture Teacher Preparation Program at California State University, Fresno. Based on the administrators experience and evaluation of their recently hired (1-5 years) teachers they were asked to indicate the level of preparation they possess in the following categories by selecting the appropriate number using a 1 to 5 Likert-type scale ranging from 1 = Not Prepared to 5 = Well Prepared.

Table 6. Summary of administrators' perceptions of new teachers' level of preparedness.

Agricultural Education Competency	n	Mean	SD
Supervising students outside the classroom	7	4.29	.95
Following established school policies and procedures	7	4.14	1.07
Communicating and working effectively with school administrators	7	4.00	.82
Supervising FFA activities	7	4.00	1.00
Working effectively with the agricultural education advisory committee	7	4.00	.82
Teaching agricultural classes	7	4.00	1.00
Working with students of diverse cultures	7	4.00	.82
Working effectively with other teachers	7	3.86	.69
Preparing lesson plans	7	3.86	1.21
Working effectively with the local community	7	3.86	.69
Supervising SAE projects	7	3.86	1.21
Maintaining discipline in the classroom	7	3.86	1.35
Planning the objectives and curriculum of the Ag. Education program	7	3.71	1.11
Completion of required reports, plans, budgets, etc. (i.e. incentive grant, R-2 report)	7	3.71	1.11
Utilizing the school farm for instruction	7	3.56	1.10

Agriculture Specialist Graduate Follow-up Survey Spring 2012:

Technical Competency Scale (Table 7)

The purpose of this scale was to measure the effectiveness of the agricultural coursework in preparing graduates to teach the core areas of agriculture. Based on the courses completed at Fresno State, participants indicated their perceived level of preparation by selecting the appropriate number using a 1 to 5 Likert-type scale ranging from 1 = Not Prepared to 5 = Well Prepared. Respondents were also asked to indicate N/A if they completed coursework at another institution or if their catalog did not require coursework in a given area

Table 7. Summary of participants preparedness level on the Technical Competency Scale

Core Agriculture Area	n	Mean	SD
Animal Science	13	4.42	.79
Agriculture Mechanics	13	3.67	.89
Ornamental Horticulture	13	3.46	1.33
Plant Science	13	3.42	1.08
Agricultural Economics/Business	13	2.69	.85
Natural Resources/Forestry	13	2.08	1.00

Professional Competency Scale (Table 8)

The purpose of this scale was to measure the effectiveness of the Agricultural Education coursework in preparing graduates to teach and perform the responsibilities of an agriculture teacher. Based on the Agricultural Education courses completed at Fresno State, participants indicate their perceived level of preparation to perform or teach by selecting the appropriate number using a 1 to 5 Likert-type scale ranging from 1 = Not Prepared to 5 = Well Prepared.

Table 8. Summary of participants preparedness level on the Professional Competency Scale

Agricultural Education Competency	n	Mean	SD
Teaching agriculture subjects	12	4.67	.65
Teaching FFA Unit	12	4.33	.89
Supervising FFA activities	12	4.25	.97
Participation in your professional associations	12	4.08	.90
Teach SAE unit	12	4.00	.85
Determine appropriate content for Ag. courses you teach	12	3.83	1.03
Utilize technology as a resource/teaching aid	12	3.42	.90
Teaching agricultural mechanics	12	3.42	1.44
Supervise school farm facilities	12	3.33	.98
Implement “Program Standards” in the management of an Ag. program	12	3.17	.83
Prepare for an Incentive Grant Review	12	2.75	.97

California State University, Fresno (10-12)
Section A-III
Analysis of Candidate Assessment Data

Agriculture Specialist

ANALYSIS OF INFORMATION IN SECTION A-II

- Seventy seven percent of the candidates enrolled in the Agriculture Specialist Credential Program from 2010 – 2012 have successfully completed the program.
- Eighty three percent of the candidates enrolled in final student teaching successfully completed the Portfolio Project.
- All candidates met the occupational experience requirement of 3,000 clock hours of occupational experience.
- Eighty three percent of the enrolled candidates successfully met the Agriculture Specialist Professional Competency Activities requirement during their final field experience.
- Eighty three percent of the enrolled candidates successfully completed the AGRI 281 Project requirement.
- Employers rated candidates above average in all areas; however, the lowest rating was for utilizing the school farm for instruction (mean score 3.56). The highest ratings were for supervising students outside the classroom (mean score 4.29) and following established school policies and procedures (mean score 4.14).
- Program completers rated their technical competence above average for all areas except Forestry and Natural Resources (mean score 2.08).
- Program completers rated their professional competence above average. The lowest rating was for preparing for incentive grant reviews (mean score 2.75). Completers rated their competence highest in teaching agricultural subjects (mean score 4.67), teaching FFA (mean score 4.33), and supervising FFA activities (mean score 4.25).

California State University, Fresno (10-12)
Section A-IV
Use of Assessment Results to Improve Candidate & Program Performance

Agriculture Specialist

Data Source	Data Focus	Action(s)	Contact Person	Timeline
Completer survey	Forestry/Natural Resources	First Step: Worked with instructor for the Range Management course to revise course syllabus. The course syllabus was revised to accommodate agricultural education students.	Dr. Vaughn Dr. Roberts	2007-2009
Employer & completer surveys,	Advisory committees	First Step: Review course outcomes and strengthen outcomes for advisory committees in AG ED 135, AG ED 187, and EHD 155B. Second Step: Revise survey instrument to meet revised student outcomes assessment plan.	Dr. Vaughn Dr. Rocca Cooperating Master Teachers Dr. Vaughn Dr. Rocca	2007-2009 2010-2012
Exit evaluation of objectives for Agriculture Specialist Candidates	Professional Agricultural Education Competencies	First Step: Review and revise the exit competency activities form to include a project similar to the FAST Holistic Project. Develop a rubric for scoring. Second Step: Implement the new Agriculture Specialist Proficiency Project.	Dr. Parham Dr. Rocca Dr. Vaughn Advisory Committee Dr. Vaughn	2008-2010 2011-2012