



Commission on Teacher Credentialing Biennial Report

**California State University, Fresno
Kremen School of Education and Human Development
Academic Years 2008-09 and 2009-10**

Institution	California State University, Fresno	
Date report is submitted	October 15, 2010	
Program documented in this report	Agriculture Specialist Credential	
Name of Program	Single Subject Program	
Credential awarded	Agriculture Specialist	
Is this program offered at more than one site?		
If yes, list all sites at which the program is offered	No	
Program Contact	Rosco Vaughn	
Phone #	559.278.5067	
E-Mail	rvaughn@csufresno.edu	
If the preparer of this report is different than the Program Contact, please note contact information for that person below:		
Name:		
Phone #		
E-mail		

California State University, Fresno (08-10)
Section A-1
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 College of Agricultural Sciences and Technology (CAST). 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 CAST.

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 member of the California State Department of Education Agricultural Education Staff 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 site. 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 2008 semester through the spring 2010 semester 24 candidates were enrolled in the Agriculture Specialist Credential Program and 22 completed the program during this time period. One candidate received no credit for final student teaching and was offered an opportunity to enroll again but the candidate 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 2008	7	2	0	2
Spring 2009	4	7	0	6
Fall 2009	10	4	0	4
Spring 2010	3	10	0	10
Totals	24	23	0	22

* Interns complete two semesters of final student teaching.

<u>Changes since Commission Approval of Current Program Document</u>	<u>Date</u>
• 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 is currently under revision. Following this revision the next graduate and employer survey will be conducted during the 2011-2012 academic year. 2012

California State University, Fresno (08-10)
Section A-2
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 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 2008 through spring 2010. 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 2008	2	4.00	100
Spring 2009	7	3.00	86
Fall 2009	4	3.75	100
Spring 2010	10	4.00	100

* 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 2008	2	4,800 – 7,056	5,928
Spring 2009	7	3,000 – 26,724	8,544
Fall 2009	4	3,000 – 32,000	13,943
Spring 2010	10	3,260 – 19,200	8,702

* 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 2008	14.0	7.5	5.0	4.0	3.0	3.5
Spring 2009	13.8	8.0	5.7	3.2	2.8	4.7
Fall 2009	14.0	8.0	5.8	4.0	2.8	4.3
Spring 2010	14.0	7.8	5.7	3.8	3.0	4.8

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 2008	2	3.00	100
Spring 2009	7	3.43	86
Fall 2009	4	3.50	100
Spring 2010	10	3.80	100

* 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 2006:

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) teacher 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.

Agriculture Specialist Competency	n	Mean	SD
Teaching about FFA	18	4.06	.87
Utilize technology as a resource/teaching aid	18	4.00	.97
Working effectively with the local community	17	4.00	1.06
Planning the objectives and curriculum of the Ag. Education program	18	3.89	1.08
Supervising students outside the classroom	18	3.83	.92
Communicating and working effectively with school administrators	18	3.83	1.25
Following established school policies and procedures	18	3.83	1.25
Supervising FFA activities	17	3.82	1.02
Teaching about supervised agricultural experience projects (SAE)	17	3.82	.81
Participation in professional associations	16	3.81	.91
Working effectively with other teachers	18	3.78	1.35
Working effectively with the agricultural education advisory committee	17	3.76	1.20
Preparing lesson plans	18	3.72	1.18
Working with students of diverse cultures	18	3.72	1.13
Supervising SAE projects	17	3.71	.85
Maintaining discipline in the classroom	18	3.61	1.24
Managing school farm facilities	15	3.60	1.18
Utilizing the school farm for instruction	18	3.56	1.10
Teaching agricultural mechanics	16	3.44	1.26
Completion of required reports, plans, budgets, etc. (i.e. incentive grant, R-2 report)	15	3.27	.96

Agriculture Specialist Graduate Follow-up Survey Spring 2006:

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, such as Natural Resources which was not required until 2003-2004.

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

Core Agriculture Area	n	Mean	SD
Animal Science	32	4.09	1.03
Agriculture Mechanics	32	3.66	.97
Ornamental Horticulture	32	3.47	1.05
Plant Science	32	3.31	1.12
Agricultural Economics/Business	32	2.97	.97
Natural Resources/Forestry	23	1.83	.83

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

Agriculture Specialist Competency	n	Mean	SD
Utilize technology as a resource/teaching aid	32	4.44	.88
Teaching agriculture subjects	32	4.25	.76
Teaching about FFA	32	4.25	.88
Participation in professional associations	32	4.19	1.09
Preparing lesson plans	32	4.09	1.06
Supervising FFA activities	31	4.03	1.02
Supervising students outside the classroom	32	3.97	1.03
Planning the objectives and curriculum of the Ag. Education program	32	3.91	1.03
Teaching about supervised agricultural experience programs (SAE)	32	3.84	.99
Working effectively with other teachers	32	3.78	1.04
Following established school policies and procedures	31	3.74	1.21
Supervising SAE programs	32	3.72	1.14
Working effectively with the local community	32	3.63	1.10
Working with students of diverse cultures	32	3.59	1.10

Utilizing the school farm for instruction	32	3.53	.95
Teaching agricultural mechanics	32	3.50	1.19
Communicating and working effectively with school administrators	32	3.50	1.16
Maintaining discipline in the classroom	32	3.34	1.23
Managing school farm facilities	32	3.13	1.04
Completion of required reports, plans, budgets, etc. (i.e. incentive grant, R-2 report)	32	2.94	1.19
Working effectively with the agricultural education advisory committee	32	2.88	1.18

California State University, Fresno (08-10)
Section A-3
Analysis of Candidate Assessment Data

Agriculture Specialist

ANALYSIS OF INFORMATION IN SECTION A-2

- Ninety two percent of the candidates enrolled in the Agriculture Specialist Credential Program from 2008 – 2010 successfully completed the program.
- Ninety two percent of the enrolled candidates successfully completed the Portfolio Project.
- All candidates met the occupational experience requirement of 3,000 clock hours of occupational experience.
- Ninety two percent of the enrolled candidates successfully met the Agriculture Specialist Professional Competency Activities requirement during their final field experience.
- Ninety two percent of the enrolled candidates successfully completed the AGRI 281 Project requirement.
- Employers rated candidates above average in all areas; however, the lowest ratings were for completion of required reports (mean score 3.27) and teaching agricultural mechanics (mean score 3.44). The highest ratings were for teaching FFA (mean score 4.06), using technology (mean score 4.0), and working effectively with the local community (mean score 4.0).
- Program completers rated their technical competence above average for all areas except Agricultural Business (mean score 2.97) and Forestry and Natural Resources (mean score 1.83). While these data are most important for the subject matter competence, implications exist for the field experience components of the program.
- Program completers rated their professional competence above average except for working with advisory committees (mean score 2.88) and completion of required reports (mean score 2.94). Completers rated their competence highest in using technology (mean score 4.44), teaching FFA (mean score 4.25) and teaching agriculture subjects (mean score 4.25). Completers and employers agreed that completion of reports was an area of weakness for new teachers. Employers rated new teachers above average in working with advisory committees, while the new teachers viewed this as an area of weakness. Both employers and completers rated teaching FFA and using technology as strength areas of new teachers.

California State University, Fresno (08-10)
Section A-4

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