



Agriculture Specialist Program Standards

Commission on Teacher Credentialing

**Standards Adopted
*August 2006***

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California Commission on Teacher Credentialing

2005-2006

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Standards of Quality and Effectiveness for Agriculture Specialist Instruction Credentials

Introductory Statement by the Agriculture Subject Matter Advisory Panel

The *Standards of Quality and Effectiveness for Agriculture Specialist Instruction Credentials* are designed to provide a basis for instruction and assessment in non-traditional classroom settings, program management, supervision of agricultural experiences, and coordination of Future Farmers of America (FFA) activities to candidates in agriculture teacher preparation programs. These standards provide for depth of knowledge in at least one of the domains of agriculture teacher subject matter preparation. The Agriculture Specialist Instruction Credential prepares and authorizes the holder to establish and maintain FFA chapter affiliations with state and national FFA organizations, and makes the holder's employing local education agency eligible for special state funding to support agricultural education programs.

This edition of *Standards of Quality and Effectiveness for Agriculture Specialist Instruction Credentials* differs in content and organization from the previous edition. The Agriculture Subject Matter Advisory Panel organized the content into three categories of program standards that contain a total of twelve program standards. The first nine standards form Category I: Program Design and Curriculum, and call for clarification of the program's structure and sequence of activities, as well as establishing required components of the program's curriculum content. Category II: Field and Occupational Experiences includes two standards that address requirements for candidates to gain practical experience in both educational and occupational venues in the discipline of agriculture. Category III: Candidate Competence and Performance establishes the scope and parameters for the assessment of candidates to ensure that they have attained a level of competence that merits recommendation for the Agriculture Specialist Instruction Credential. The panel made extensive efforts to incorporate the standards of quality and effectiveness for programs of instruction in agricultural education as identified by the *Strategies Manual for Program Improvement* published by the California Department of Education's Agricultural Education Unit.

The inclusion on this panel of university and K-12 faculty, with additional input from representatives of the Agricultural Education Unit of the California Department of Education, provided assurance that all education sectors were represented and their needs and interests were addressed in the development of these standards. The panel wishes to thank the substantial number of agricultural education experts who contributed both directly and indirectly to these standards.

Each standard is designed to be comprehensive enough to provide general direction for university programs of agriculture education, yet flexible enough to allow and encourage local enrichment. Programs are encouraged to consider alternative options for organizing the curriculum. As long as all required program elements are included, a program will be determined to have met the standards.

Preconditions

Preconditions are requirements that must be met in order for an accrediting association or licensing agency to consider accrediting a program sponsor or approving its programs or schools. Some preconditions are based on state laws, while other preconditions are established by Commission policy. Institutions are required to submit information related to the Preconditions to the Commission at three points in the accreditation system: 1) during year one of the accreditation cycle, 2) during year four of the accreditation cycle and 2) upon submitting a new program proposal.

There are essentially two kinds of preconditions. The first are the Commission's ten General Institutional Preconditions. These apply to all professional preparation programs—teacher and services credential preparation programs. These preconditions do not apply to subject matter programs.

The second type of preconditions apply to particular kinds of credential preparation programs. There are four Program Specific Preconditions that apply to all types of educator preparation programs. In addition, there are preconditions for many types of educator preparation programs. All program sponsors must respond to each of the applicable preconditions.

Click to the following link to locate the preconditions. <http://www.ctc.ca.gov/educator-prep/standards/Standards-Preconditions.pdf>.

*The required Preconditions for the **Agriculture Specialist** are: General Preconditions 1-10; Program Specific Preconditions 1-4 and 5-8.*

Common Standards

The Common Standards address issues of institutional infrastructure, stability, and processes that are designed to ensure that the implementation of all approved programs is successful and meets all standards. Consequently, there is a single response to the nine Common Standards that reflects the institution's support of each of its educator preparation programs. Institutions are required to submit information related to the Common Standards to the Commission at two points in the accreditation system: 1) during year 5 of the accreditation cycle- the year before the accreditation site visit; and 2) upon submitting a new program proposal.

The institution must develop **one response** to the Common Standards that reflects institutional support for all approved educator preparation programs. In other words, individual programs do not respond to the Common Standards. The Common Standards document is inclusive of the entire unit, consequently only one Common Standards document will be submitted to the CTC for each approved institution/program sponsor regardless of how many approved programs are offered. Click on the following link to locate the Common Standards <http://www.ctc.ca.gov/educator-prep/STDS-common.html>.

If the institution's Common Standards are up to date and the institution submits a new program proposal, the institution must complete an addendum to the Common Standards that assures the Commission that the institution will support the proposed program in the same way it has supported other educator preparation programs. Click on the following link to locate the Common Standards Addendum <http://www.ctc.ca.gov/educator-prep/program-standards.html>.

The Common Standards Glossary should be consulted for definitions of any of the terms found in *italics* in the Common Standards.

Standards of Quality and Effectiveness for Agriculture Specialist Instruction Credential Programs

Category 1: Program Design and Curriculum

Standard 1: Program Design

The Agriculture Specialist Instruction Credential program and its prerequisites include a purposeful, developmentally designed sequence of coursework and field experiences that effectively prepare candidates to serve as agriculture specialists in California schools and lead agriculture education programs. The sequenced design of the program is based on a clearly stated rationale that has a sound theoretical and scholarly foundation anchored in the knowledge base of teacher education. The program's organizational structure ensures that all of its administrative components are carefully coordinated. By design, the program provides extensive opportunities for candidates to learn and apply the concepts, skills and principles included in this set of program standards.

Required Elements for Standard 1: Program Design

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 1(a) The design of the program and the selection of prerequisites are clearly grounded in a well-reasoned rationale that draws on sound scholarship and theory anchored to the knowledge base of teacher education, are articulated clearly, and are evident in the delivery of the program's coursework and fieldwork. Program activities are carefully sequenced to ensure that candidates appropriately develop their competence in the performance standards defined in Category III.
- 1(b) The program design and its delivery form a cohesive set of learning experiences that provide candidates with the opportunity to develop the knowledge and skills required to serve as agriculture specialists and to lead agriculture education programs.
- 1(c) The program has an organizational structure that provides for coordination of the administrative components of the program to facilitate each candidate's completion of the program.
- 1(d) Coursework and field experiences utilize a variety of strategies for professional instruction and provide multiple opportunities for candidates to learn and practice the concepts, skills and principles included in this set of program standards.

Standard 2 – Career and Technical Education

The program includes preparation to develop and apply specialized knowledge and understanding of the philosophy, history, issues and trends, and current research associated with career and technical education, and their specific influence and effect on agriculture education programs.

Required Elements for Standard 2 – Career and Technical Education:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 2(a) The program provides candidates with knowledge of the philosophical underpinnings of career and technical education with particular attention to the role occupational experience plays in this type of education, and the ability to apply this knowledge in the development and implementation of agriculture education programs.
- 2(b) The program provides candidates with the historical background for the emergence of career and technical education as a component of a comprehensive education.
- 2(c) The program exposes candidates to current and emerging trends that affect career and technical education, including the increased emphasis on core educational skills and standardized learning and assessment of those skills, and the effects of these trends on agriculture education programs.
- 2(d) The program provides candidates with current and emerging research on the value of situated and contextual learning in terms of acquiring knowledge, understanding and skills for academic and career success, and methods for creating educational experiences reflecting this research.

Standard 3 – Program Management

The program provides candidates with the knowledge, skill, and the ability to integrate and apply the concepts of agriculture program development and administration required to successfully manage agriculture education programs. The program prepares candidates to obtain community support for and involvement in agriculture programs, acquire necessary resources, and maintain program accountability. The program familiarizes candidates with key agriculture programs and organizations, including Supervised Agriculture Experiences and Future Farmers of America.

Required Elements for Standard 3 – Program Management:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 3(a) The program prepares candidates to organize and deliver a comprehensive program of agriculture instruction, including identification of relevant instruction, appropriate sequencing of courses, and articulation of curriculum.
- 3(b) The program provides candidates with knowledge and skills needed for acquisition of instructional resources, including identifying grant and funding opportunities and available community resources.
- 3(c) The program prepares candidates to integrate classroom instruction, activities related to Future Farmers of America (FFA) programs, and Supervised Agricultural Experiences (SAEs).
- 3(d) The program provides candidates with knowledge and skills needed to design and develop community-based programs, including assembling advisory committees, managing support/booster organizations, and accessing community resources.
- 3(e) The program prepares candidates to maintain program accountability.
- 3(f) The program exposes candidates to statewide organizations that are actively involved in agricultural education.

Standard 4 – Coordination of Supervised Agricultural Experience (SAE) Programs

The program includes basic preparation that develops the knowledge, skill and the ability to integrate and apply the concepts required to coordinate Supervised Agricultural Experience (SAE) Programs and advise and supervise students in those programs.

Required Elements for Standard 4 – Coordination of Supervised Agricultural Experience (SAE) Programs:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 4(a) The program provides candidates an opportunity to develop and demonstrate knowledge and understanding of record keeping using the California FFA Record Book.
- 4(b) Through the program, candidates develop the skills required to conduct successful project site visits, including home, school farm, and employer visits.
- 4(c) The program provides candidates an opportunity to develop the ability to assist students in identifying and establishing appropriate project selection, placement, planning, managing and marketing.
- 4(d) The program ensures that candidates have a deep understanding of the ethical principles that govern the design and development of appropriate student projects and supervised agricultural experiences.

Standard 5 – Coordination of Future Farmers of America (FFA) Programs

The program provides candidates with knowledge and understanding of principles of leadership, cooperation, and relationships with appropriate constituencies, and the ability to integrate and apply those principles through the Future Farmers of America (FFA) Program.

Required Elements for Standard 5 – Coordination of Future Farmers of America (FFA) Programs:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 5(a) The program provides candidates with the knowledge of student, chapter and community development activities of the FFA needed to successfully organize and provide oversight of these activities.
- 5(b) Through the program, candidates develop methods for integrating leadership concepts and activities and procedures of student organizations into the agriculture curriculum.
- 5(c) The program ensures that candidates gain knowledge and skill in creating and maintaining positive interpersonal relationships, including relating to students, parents, other teachers, school administrators, local industry and the general community.

Standard 6 – Area of Specialization

The program requires specialized study – beyond that required for basic preparation – in one of the following domains: animal science, plant and soil science, ornamental horticulture, agricultural business management, environmental science and natural resource management, or agricultural systems technology. One subject matter specialization area must be developed to the extent that the candidate has advanced knowledge, skill, and ability to integrate concepts in greater depth than that required for the single subject credential in agriculture.

Required Elements for Standard 6 – Area of Specialization:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 6(a) The program design includes specific procedures for identifying each candidate’s area of specialization and the activities the candidate will complete to fulfill this program requirement.

- 6(b) The program requires each candidate to demonstrate advanced knowledge in one of the six domains in agriculture as defined in the Specific Preconditions for the Agriculture Specialist Instruction Credential.

Standard 7 – Teaching Methods in Agricultural Systems Technology

The program prepares candidates for the additional challenges presented in teaching in a shop or outdoor environment with potentially hazardous materials and equipment. The program requires basic preparation that develops knowledge, skill and the ability to establish, maintain and teach in safe and effective shop and field environments where students will utilize tools, machinery and equipment, and to manage student learning activities and behavior to maintain safe conditions for learning.

Required Elements for Standard 7 – Teaching Methods in Agricultural Systems Technology:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 7(a) The program includes pedagogical preparation specific to teaching Agricultural Systems Technology (Agricultural Mechanics) including cognitive and psycho-motor ~~domains~~ applications.
- 7(b) The program prepares candidates to develop lesson plans and teaching materials appropriate to Agricultural Systems Technology (e.g. projects, drawings)
- 7(c) The program trains candidates in the application of current safety practices required of classroom teachers and practices common to industry relating to hand tools, power tools, and agricultural machinery (e.g. tractors, harvesters).
- 7(d) The program ensures that candidates are knowledgeable in the proper selection, nomenclature, and proper use of tools commonly used in agricultural systems technology.
- 7(e) The program provides candidates with strategies in managing student behavior in shop and field settings to ensure a safe learning environment.
- 7(f) The program prepares candidates in facilities planning, management, and maintenance (e.g. budgeting, tool and material selection and purchasing, tool management, safety inspection).

Standard 8 – Teaching in Non-traditional Learning Environments

The program requires each candidate to demonstrate the ability to teach in venues other than the traditional classroom environment.

Required Elements for Standard 8 – Teaching in Non-traditional Learning Environments:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 8(a) The program provides strategies and methods for teaching in non-traditional learning environments.
- 8(b) Program coursework provides each candidate with opportunities to practice teaching and class management strategies in non-traditional learning environments that are common to agricultural education programs in California.
- 8(c) Non-traditional learning environments in which candidates are provided an opportunity to practice must include, but are not limited to, agricultural technology shops, school laboratories, school farm locations and school field trips.

Standard 9 – Career Planning and Preparation

The program provides the opportunity for candidates to develop the knowledge, skill and ability to integrate and apply concepts of career planning and preparation in careers in agriculture needed to advise students, including the foundations of work, the career development process, occupational skills standards, and workplace skill requirements.

Required Elements for Standard 9 – Career Planning and Preparation:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 9(a) The program provides candidates with knowledge of the history, organization and future of work and how work relates to the needs and functions of the economy and society, both generally and in specific agricultural occupations.
- 9(b) The program familiarizes candidates with career development concepts, an understanding of the relationship between work and learning, and the fundamentals of the career planning process, both generally and in specific agricultural occupations.
- 9(c) The program exposes candidates to professional literature relating to specific content area and workplace needs, both generally and in specific agricultural occupations.
- 9(d) The program provides candidates with an understanding of economic and socio-economic conditions, patterns of business development, and changing labor and career opportunities and their impact on the relevancy of classroom instruction, both generally and in specific agricultural occupations.
- 9(e) The program provides candidates with an understanding of the value of instilling lifelong learning concepts as a component of career success, both generally and in specific agricultural occupations.

Category II: Field and Occupational Experiences

Standard 10 – Field Experience

Each candidate in the program completes substantive, supervised field experiences in public schools selected by the program sponsor. Field experiences may be completed concurrently with a candidate's student teaching assignment for the single subject credential in agriculture, and must extend the candidate's understanding of major ideas and emphases developed in the program and provide the candidate an opportunity to apply these concepts in school situations. These field experiences further develop the candidate's knowledge and experience in agricultural educational program management, entrepreneurial and workplace learning, professional development, and student leadership activities. At least one field experience placement must include experience in non-traditional learning environments.

Required Elements for Standard 10 – Field Experience:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 10(a) The field experience prepares candidates to practice multiple strategies for managing and delivering instructional programs in agriculture, and to effectively communicate and cooperate with colleagues and other school staff to establish and maintain program support.
- 10(b) The field experience provides an opportunity for candidates to develop practical skill in providing entrepreneurial and workplace education, including assisting students in selecting and planning supervised agricultural experiences; conducting effective home visits; supervising students with work experience projects; and assisting students in preparing award applications.
- 10(c) The field experience allows candidates to participate in appropriate district professional development activities; to participate in section, regional and state meetings, conclaves and skills sessions; and to attend and participate in university sponsored seminars.
- 10(d) The field experience provides an opportunity for candidates to gain familiarity in student leadership activities, including serving as an advisor in at least one agriculture student meeting and at least one individual agriculture student activity, and chaperoning at least one agriculture student contest or leadership event.
- 10(e) At least one field experience placement must include experience in non-traditional learning environments as defined in Standard 8.

Standard 11 – Occupational Experience

The program requires each candidate to develop knowledge of and experience in employer/employee interactions and agricultural occupations by completing occupational experience in one or more of the following domains: animal science, plant/soil science, ornamental horticulture, agriculture business management, environmental science and natural resource management and/or agricultural systems technology.

Required Elements for Standard 11 – Occupational Experience:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 11(a) The program requires each candidate to complete occupational experience as defined in the Specific Preconditions for the Agriculture Specialist Instruction Credential.
- 11(b) One or more of the occupational experiences provide an opportunity for the candidate to develop an understanding of and experience in employer/employee interactions.
- 11(c) One or more of the occupational experiences provide an opportunity for the candidate to gain knowledge, skills and concepts concerning employment in agricultural occupations that can be integrated into the agricultural classroom.

Category III: Candidate Competence and Performance

Standard 12 – Assessment of Candidate Competence

Prior to recommending each candidate for the Agriculture Specialist Credential, one or more persons who are responsible for the program determine, on the basis of thorough documentation and written verification by at least one supervising teacher and one institutional supervisor, that the candidate has met all requirements and competencies for the Agriculture Specialist Instruction Credential. This determination is based on documentation of completion of all specific program requirements and verification that the candidate has demonstrated competence in each of the elements listed below, as evidenced by multiple measures, including a combination of formative and summative assessments.

Required Elements for Standard 12 – Assessment of Candidate Competence:

An accreditation team determines whether the Agriculture Specialist Instruction Credential program meets this standard based on evidence provided by the program sponsor. The team must determine that the quality of the program has been clearly and effectively substantiated in relation to each of the following elements:

- 12(a) Each candidate understands the philosophy, history, issues and current research associated with career and technical education and their specific influence on agriculture education, and is able to apply these concepts in the development and implementation of agriculture education programs.
- 12(b) Each candidate is prepared to manage agriculture education programs based on knowledge of the appropriate curriculum, the ability to garner program resources and establish community support, familiarity with leading state and national agriculture education organizations, and an understanding of key concepts of program management and accountability, and is able to apply this information in the management agriculture education programs.
- 12(c) Each candidate has a working knowledge of the integral nature and purpose of supervised agricultural experience programs, is familiar with related activities including record keeping, home visits, project advisement and management, and project ethics, and is able to apply this information in the supervision of student agriculture experiences.
- 12(d) Each candidate has an understanding of the integral nature, key principles and activities of Future Farmers of America (FFA), including principles of leadership, student chapter and community development activities, appropriate procedures for student organizations, and creating and maintaining positive interpersonal relationships, and is able to integrate and apply these activities and principles in FFA programs and related student agriculture education experiences.

- 12(e) Each candidate has completed a program of specialized study in one of the six agriculture domains identified in Standard 6, from which the candidate has developed advanced knowledge and understanding of this area of specialization, and is able to apply this advanced knowledge and understanding in the development and implementation of agriculture education programs.
- 12(f) Each candidate understands the special issues involved in teaching agriculture systems technology, including the hazards existent in working with tools and equipment and methods for mitigating those hazards and ensuring safety; specialized pedagogical skills and practices involved in this domain; and tool, equipment and facility use and management; and is able to apply this information in the development and implementation of agriculture systems technology education.
- 12(g) Each candidate is prepared to plan and successfully execute agriculture education experiences in non-traditional learning environments, including implementing appropriate class management strategies in non-classroom situations such as agricultural technology shops, school laboratories, school farm locations and school field trips.
- 12(h) Each candidate is able to competently advise students in planning and preparation for careers in agriculture through the candidate's knowledge of career development concepts and the organization and needs of the and future workplace in general and the agriculture industry specifically.