

*California
Commission on Teacher Credentialing*

*Meeting of
August 13 - 14, 2003*

AGENDA ITEM NUMBER: GS – 10-B

COMMITTEE: General Session

TITLE: Proposed Options to Align Supplementary Authorizations to No Child Left Behind

Action

Information

Strategic Plan Goal(s) :

Provide leadership in exploring multiple, high quality routes to prepare professional educators for California's schools.

Presented By: Dale Janssen

Prepared By: _____ Date: 07/24/03
Terri H. Fesperman, Assistant
Consultant, Certification, Assignment
and Waivers Division

Approved By: _____ Date: 07/24/03
Dale A. Janssen, Director
Certification, Assignment and
Waivers Division

Authorized By: _____ Date: 07/24/03
Sam W. Swofford, Ed.D.
Executive Director

Proposed Options to Align Supplementary Authorizations to No Child Left Behind

July 24, 2003

Summary

The Federal *No Child Left Behind Act* of 2001 (NCLB) requires that teachers hired to teach in Title I schools after July 1, 2002 and all teachers in NCLB core academic subject areas by July 1, 2006 to be “highly qualified.” This agenda item offers options the Commission may wish to consider to bring the currently issued supplementary authorization in core academic subject areas into alignment with NCLB for teachers new to the profession.

Fiscal Impact

Funding for this work is provided in the Commission’s baseline budget.

Policy Issues to be Resolved

Should the Commission develop degree authorizations to be in alignment with the “highly qualified” teacher requirement of NCLB?

Credentials and Authorization Issued by the Commission

One of the skill sets to be a “highly qualified” teacher is subject matter competence. The subject matter competence requirement for the multiple subject and single subject credentials may be satisfied by achieving a passing score on the appropriate Commission-approved subject matter examination or completing a Commission-approved subject matter preparation program at a California college or university. These options are included in the agenda item pertaining to Standard 6 of the Subject Matter Programs. Candidates in the elementary subject matter preparation program must complete a minimum of 84 semester units, or equivalent quarter units, including, but not limited to language studies and literature, mathematics, science, social science, history and humanities, visual and performing arts, physical education and human development. Single subject matter preparation program candidates complete approximately 45 semester units, or equivalent quarter units, in the specific single subject authorization. Listed below are the subject matter authorizations that may be currently listed on a single subject credential.

Single Subject Credential Authorizations

Agriculture	Languages other than English
Art	Mathematics
Biological Sciences (Specialized)	Music
Business	Physical Education
Chemistry (Specialized)	Physics (Specialized)
English	Science: Biological Sciences
Foundational-Level Mathematics	Science: Chemistry
Geosciences (Specialized)	Science: Geosciences
Health Science	Science: Physics
Home Economics	Social Science
Industrial and Technology Education	

A multiple subject credential holder may be assigned to teach in a self-contained classroom at any grade level, preschool, K-12, and classes organized primarily for adults, such as those found in elementary schools. In addition, the teacher may serve in a core or team teaching setting at the

middle school level. A “core” setting is one in which an individual teaches two or more subjects to the same group of students. Team teaching generally means two or more teachers who each teach all the subjects in a self-contained classroom and each of the teachers provide instruction for one period in a specific subject. For example, one teacher provides language arts instruction to both classes while the other teaches science to both. A single subject credential authorizes the holder to teach the specific subject(s) named on the credential in departmentalized classes at any grade level preschool, grades K-12, and classes organized primarily for adults, such as those in most middle schools and high schools.

Supplementary authorizations may be added to both multiple subject and single subject teaching credentials. The Commission has issued supplementary authorizations for single subject credentials since 1979 and multiple subject credentials since 1981. The Commission issues two types of supplementary authorizations: Introductory Supplementary Authorizations that authorize the holder to teach the supplementary subject in grades 9 and below that are issued in the broad single subject areas and Specific Supplementary Authorizations that may only be added to single subject credentials and authorize teaching the specific subject in grades preschool, K-12 and classes organized primarily for adults. While the Specific Supplementary Authorization has the same grade level authorization as the single subject credential, the teacher is limited to only teaching the specific supplementary subject and not all subsumed subjects in the subject area. The Commission initially issued 5118 new supplementary authorizations in 2001-2002.

Supplementary authorizations are commonly used at the middle and high schools in a variety of assignments. While holders of multiple subject credentials are currently authorized to teach in a core setting (two or more subjects to the same group of students) at the middle school level, employers use holders of supplementary authorizations to teach additional departmentalized classes outside their core assignment. Holders of single subject teaching credentials with introductory supplementary authorizations are also used to teach at the middle school level in core and departmentalized classes outside the subject of their credential. At the high school level, the specific supplementary authorizations are used to offer additional classes in subjects such as drafting, economics, literature, and psychology. In addition, elementary schools use holders of supplementary authorizations to teach physical education, art, music, and science to students during the self-contained classroom teacher’s prep period.

The United States Department of Education (USDE) informed the State Board of Education that further guidance on “highly qualified teacher” would be released in late July or early August on how to determine if a teacher is teaching at the elementary, middle, or high school level. The USDE informed the State Board that each state, or even each local education agency, could make their own determination based on how the curriculum is being delivered. For example, teachers instructing multiple subjects taught together in one class of students in grades 5-8 such as a core assignment could be considered elementary in nature, while classes taught separately in a departmentalized setting, could be considered middle school. Differentiating teachers by the nature of curriculum taught should help school districts to determine if the Multiple or Single Subject Credential is appropriate to meet the “highly qualified teacher” requirement for grades 5-8 and perhaps some alternative school programs.

In addition to the basic teaching credential, a supplementary authorization requires the completion of 20 semester or 10 upper division semester units, or equivalent quarter units, of course work in the subject requested. Specific Supplementary Authorizations require all of the 10 or 20 unit requirement be in the specific subject requested. The Introductory Supplementary

Authorizations require at least one course in specified areas within the 10 or 20-unit requirement in courses within the broad subject category. For example, in the area of English an individual must have at least one course in grammar, composition, and literature. An individual may also qualify by having a college major from a regionally accredited college or university in a subject directly related to the subject to be listed. However, out of 2384 introductory supplementary authorizations issued in 2001-2002 in the four subject areas of English, math, science, and social science, only 480 were issued to individuals who qualified by holding a degree in the subject area, which is approximately 20%.

In 1999, the Commission approved a standards-based supplementary authorization program in Mathematics as a different way to qualify for a supplementary authorization. The program requires a college or university to submit a program for Commission approval to allow their students to obtain the supplementary authorization. At this time only one university has shown interest in this model.

Since supplementary authorizations do not require an individual to hold a degree in the subject area of the supplementary authorization, those supplementary subject areas that fall under the NCLB core academic subject areas will not be NCLB compliant unless the holder qualified by holding a degree in the subject area. The charts below divide the list of currently issued supplementary authorizations (both introductory and specific) into NCLB core and non-core academic subjects.

<i>Core Academic Supplementary Authorizations</i>	
Biological Science	Introductory Languages other than English
Chemistry	Introductory Mathematics
Comparative Political Systems and International Relations	Introductory Music
Dance	Introductory Science
Drama	Introductory Social Science
Economics	Literature
Economics and Consumer Education	Painting and Drawing
English Composition	Physics
Geography	Plant Science
Geoscience	U S Government and US Civics
Graphic Arts	US History and California History
Instrumental Music	Vocal Music
Introductory Art	World History
Introductory English	

<i>Non-Core Academic Subject Supplementary Authorizations</i>	
Accounting (including Finance)	Introductory Agriculture
Agricultural Mechanics	Introductory Business
Animal Science	Introductory Health Science
Anthropology	Introductory Home Economics
Auto Mechanics	Introductory Industrial Arts
Child Development (Home Economics)	Introductory Physical Education
Clothing and Textiles (Home Economics)	Journalism
Computer Concepts and Applications	Marketing/Entrepreneurship

Consumer Education (Home Economics)	Metals (Industrial Arts)
Crafts Including Jewelry and Ceramics	Office Technologies including Word Processing and Business Communications
Drafting	Ornamental Horticulture
Electronics	Photography
Family Life and Parenting (Home Economics)	Plastics (Industrial Arts)
Family Life Education including Drug, Alcohol and Tobacco Use Prevention (Health Science)	Psychology
Food and Nutrition (Home Economics)	Sociology
Forestry and Horticulture	Speech
Industrial Crafts and Plastics	Woods (Industrial Arts)
Interior Design (Home Economics)	

The Commission may wish to consider the options outlined below pertaining to the current supplementary authorization requirements. The chart in Appendix A summarizes the requirements and authorization for the single and multiple subject credentials, current supplementary authorizations, and Option 1S.

Option 1S

The Commission would develop a new Degree Authorization and issue introductory and specific degree authorizations in the subjects listed below. An introductory degree authorization would authorize service in grades 9 and below and be limited to the broad core academic subject areas. Specific degree authorizations would authorize service in preschool, grades K-12 in the specific subject area.

Subject areas for Introductory Degree Authorization

- | | | |
|------------------------------|-------------|----------------|
| Art | Mathematics | Social Science |
| English | Music | |
| Languages other than English | Science | |

Requirements for Introductory Degree Authorization

- 1) Teaching credential based on bachelor’s degree and teacher preparation program including subject matter competence, and
- 2) One of the following:
 - An undergraduate major in the broad subject area or within the broad subject area (Example: for English Degree Authorization, a degree in English, Shakespearean literature, or English composition), or
 - 32 semester units, or equivalent quarter units, including at least 16 upper division units of course work in the broad subject area with a minimum of a three semester unit, or equivalent quarter unit, course in each specific content area as currently required for a supplementary authorization (Example: Social Science would need one course in United States history, California history, world history, geography, and United States government).

Note: Degree or course work to meet one of the options being proposed must be from or accepted by a four-year degree granting regionally accredited college or university.

Subject areas for Specific Degree Authorization

Civics	Geography	Language Arts
Dance	Government	Literature
Drama	Graphic Arts	Painting and Drawing
Economics	History	Plant Science
English Composition	Instrumental Music	Vocal Music

Requirements for Specific Degree Authorization

- 1) Teaching credential based on bachelor's degree and teacher preparation program including subject matter competence, and
- 2) One of the following:
 - Undergraduate major in specific subject area,
 - Undergraduate major in a subject within the broad subject area with a minimum of twenty semester units, or equivalent quarter units, in the specific subject area (Example: major in social science with 20 semester units in geography)
 - A minimum of 32 semester units, or equivalent quarter units, including at least 16 upper division units of course work in the specific subject area.

Note: Degree or course work to meet one of the options being proposed must be from or accepted by a four-year degree granting regionally accredited college or university.

Option 2S

The Commission would develop a Degree Authorization as outlined in Option 1S, however the equivalent unit requirement for the major would be a minimum of 45 semester units including at least 16 upper division units.

Option 1S and 2S differ based on the number of semester units needed to be equivalent to a major. The 1S option defines the major in the terms of core course work and does not include the units required for electives. Attachment B is a memo from Dr. Shelley Kriegler, Director, UCLA Math Content Programs for Teachers, stating that the 32 unit requirement outlined in Option 1S is the core major requirement without electives. The Degree Authorization is an added authorization to a teacher already holding a credential and already holding another major, consequently Dr. Krieger makes the point that it is not necessary to use the units for electives for the Degree Authorization. The 45-semester unit major equivalence is based on 30 semester units in core course work for the major and approximately 15 semester units for electives. Appendix C is an excerpt from the 2003-04 Stanford University catalog that explains the purpose of the major and the major requirement at Stanford. The Standards of Accreditation from the Western Association of Schools and Colleges, lists as a guideline, "The institution has a program of General Education that is integrated throughout the curriculum, including at the upper division level, consisting of a minimum of 45 semester credit hours (or the equivalent) together with significant study in depth in a given area of knowledge (typically described in terms of a major)."

Option 3S

The Commission would not change the current structure of the supplementary authorizations.

Appendix A

Comparison of Authorization and Requirements

	Authorization	Requirements
Single Subject Credential	Broad subject and subjects within the broad subject area in grades preschool, K-12, and adults	Bachelor's Degree, CBEST, teacher preparation program, and subject matter competence
Multiple Subject Credential	Self-contained in grades preschool, K-12, and adults and core and team teaching settings in grades 5-8	Bachelor's Degree, CBEST, teacher preparation program, and subject matter competence
Proposed Introductory Degree Authorization (Option 1S/2S)	Broad core academic subject area in grades 9 and below	Basic teaching credential and either a degree in or within the broad subject area OR 32-45 semester units in the broad subject area with a minimum of a three semester unit course in each specific content area as currently required for a supplementary authorization
Proposed Specific Degree Authorization (Option 1S/2S)	Specific core academic subject area in grades K-12	Basic teaching credential and either a degree in the specific subject area or in a subject within the broad subject area with a minimum of a twenty semester units in the specific subject area OR 32-45 semester units in the specific subject area
Introductory Supplementary Authorization	Broad subject in grades 9 and below	Basic teaching credential and one course in specified areas within the 10 or 20 semester unit requirement in courses within the broad subject category
Specific Supplementary Authorization	Specific subject in grades preschool, K-12 and adults	Basic teaching credential and 10 or 20 semester units in the specific subject area

Appendix B

July 21, 2002

TO: California Commission on Teacher Credentialing

FROM: Shelley Kriegler, Ed.D.
UCLA Department of Mathematics
Director, UCLA Math Content Programs for Teachers
kriegler@ucla.edu
310-794-6588

RE: Unit requirements for a Major

As a member of the UCLA Mathematics Department and a professional concerned about the content competency of teachers in mathematics, I am a strong supporter of the Commission's efforts to increase the unit requirements for teachers to earn a "degree authorization" to teach in middle school (specifically mathematics). I am also aware of NCLB requirements for HQT that require teachers to complete coursework equivalent to a "major."

As I understand it, candidates who wish to complete a subject matter program to earn a full single subject credential must complete 30 semester units in their subject area and 15 additional electives in subject-related areas. Based on a survey by my staff, this number of units is consistent with requirements at major universities in California where most departmental majors require 36-60 units. As an example, specific unit requirements at four universities for mathematics majors are listed below.

	LOWER DIVISION REQUIREMENTS MATHEMATICS MAJOR		UPPER DIVISION REQUIREMENTS MATHEMATICS MAJOR		ELECTIVES MATHEMATICS MAJOR	
	# of courses	semester units (quarter units)	# of courses	semester units (quarter units)	# of courses	semester units (quarter units)
UCLA	6	16 (24)	7	16 (24)	8	24 (32)
USC	2	8	6	24		
Berkeley	4	16	4	16	4	16
Stanford	5	17(25)	4	16 (24)	2	10 (15)

It would seem reasonable to expect credentialed teachers who wish to earn an added degree authorization to teach through grade 9 only, to complete the required units for the major (about 32 semester units) only. This would constitute the core of a major in the subject area, and it would fall within the range of units required for a major. More importantly, I believe it would be an adequate number of courses to prepare the candidate.

I believe it is also important for the Commission to provide some guidelines for the content of the courses, and that the various California Content Standards can be useful here. In general I believe that middle school teachers should be familiar with topics about three years below and three years above the topics taught (grades 3-11). This means, for example, that a middle school mathematics teacher should fully understand computational algorithms and algebraic thinking – two topics in elementary school mathematics that are not included in a typical college curriculum. Therefore, coursework for the authorization should include these topics.

Please feel free to contact me to work with any Commission committees involved in establishing guidelines for mathematics, as I am happy to contribute my knowledge and time towards the solution of this credentialing problem.

Appendix C

Excerpt from the 2003-04 Stanford University Catalog

THE MAJOR

The primary purpose of the major is to encourage each student to explore a subject area in considerable depth. This in-depth study complements the breadth of study promoted by the General Education Requirements and, in many cases, by a student's choice of electives. Work in depth permits practice in critical analysis and the solving of problems. Because of its depth, such study also provides a sense of how knowledge grows and is shaped by time and circumstances. The structure of a major should be a coherent reflection of the logic of the discipline it represents. Ideally, the student should be introduced to the subject area through a course providing a general overview, and upper-division courses should build upon lower-division courses. The course of study should, if feasible, give the student the opportunity and responsibility of doing original, creative work in the major subject. Benefits of the major program are greatest when it includes a culminating and synthesizing experience such as a senior seminar, an undergraduate thesis, or a senior project.

REQUIREMENTS

Undergraduates must select a major by the time they achieve junior status (85 units completed). All undergraduate major programs listed in this bulletin, except for certain honors degree programs that require application and admission in advance, are open to all students. ... Check individual department or program listings in this bulletin for the undergraduate degrees offered and for specific major requirements. If an area of study has no baccalaureate degree, that discipline is not available as a regular undergraduate major. Faculty set the minimum requirements for the major in each department. These requirements usually allow latitude for tailoring a major program to a student's specific educational goals. The responsibility for developing a major program within department or program requirements lies ultimately with the individual student working in consultation with the major adviser.