Executive Summary: This agenda item provides an overview of issues relating to the preparation of multiple and single subject teachers and discusses implications for the potential review and revision of general education teacher preparation standards.

Recommended Action: For information only

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Strategic Plan Goal: 1

Promote educational excellence through the preparation and certification of professional educators

- Sustain high quality standards for the preparation and performance of professional educators and for the accreditation of credential programs
Overview of Issues Relating to the Preparation of Multiple and Single Subject Teachers

Introduction
The current set of state-adopted educator preparation program standards are those established pursuant to SB 2042 (Chap. 548, Stats. 1998). The road to developing these standards was lengthy and involved the work of two different panels of California educators, policy makers, and others over a several year period. The initial panel authorized to begin the standards development work was established under SB 1422 (Education Code Section 44259.2a). That panel established the structure and basic content of the teacher preparation standards during its work in 1995-1997. Some of the revolutionary decisions were to reframe the standards from an all-inputs design to a focus on the interrelationship between inputs and subsequent candidate outcomes, and to codify this relationship into a linked “Learning to Teach Continuum”; to establish a Teaching Performance Assessment (TPA) system and require passage of the TPA as a condition of earning an initial credential; to rethink the relationship between the content covered in initial preparation and in induction; to require induction as a condition for earning a Clear credential; to include preparation to teach English learners within the initial preparation of all multiple and single subject teachers; and to require enhanced field experiences for all candidates.

Responsibility for the implementation of that structure and content was then assigned by the SB 2042 legislation to a subsequent panel also composed of an extensive group of experts in content, pedagogy, and education policy. This panel issued the array of SB 2042 standards, including multiple and single subject teacher preparation, over a four year time sequence. The oldest of the SB 2042 standards were developed and adopted by the Commission initially in 1998-2000; several have had minor updates since then (http://www.ctc.ca.gov/commission/agendas/2009-01/2009-01-3D.pdf). It is the Commission’s policy to periodically review adopted standards to ensure that the standards remain up to date and meet the preparation needs of educators for California public schools. That time has now come for the program standards relating to the preparation of general education teachers.

Background
In the more than ten years since the large-scale standards development effort pursuant to SB 2042, much has changed that may affect the appropriateness and the effectiveness of the SB 2042 standards to prepare general education teachers to work with all of California’s K-12 students. Some of these factors were not even on the horizon at the time of the SB 2042 legislation while others may have been voiced but had not yet gained widespread currency. These issues have evolved over time to the point where they now have a significant influence on teaching and learning, as well as on school organizational structures.

Examples of these factors are:
a. Federal law and other federal initiatives
   - Title II Reporting
   - No Child Left Behind and Highly Qualified Teacher requirements
A Closer Look at Key Policy Issues Affecting the Current and Future Preparation and Authorizations of General Education Teachers

A. Issues Relating to the Structure of the Multiple and Single Subject Credentials

- The structure of the multiple and the single subject credential (including authorizations and also how other states’ credentials are organized)

California’s present credential structure offers two basic types of general education teaching credentials: “multiple subject” or elementary and “single subject” or secondary. The distinction between the two credentials and their authorizations is based on a
combination of subject matter, grade level, and/or teaching context. For example, the “multiple subject” credential authorizes the holder to teach a range of content to students in self-contained classes at grades pre-K-12, and in classes organized primarily for adults. The majority of individuals holding multiple subject credentials teach in elementary schools. The “single subject” credential authorizes an individual to teach the specific content area at any of the grades pre-K through 12 and also to adults.

Other states offer examples of different organizational structures and authorizations for general education teachers. For example, several states offer an early childhood credential that serves a range of ages from birth through grade 2 or 3 along with an elementary credential that may begin with grade 2 or 3. These and other states also offer a variety of middle grades credentials that serve a range of grade levels from 4-9, depending on the state. It is relatively common for states to offer a middle grades credential in addition to a secondary grades credential. It is typical for grade levels to overlap across these credentials.

Within California there have been suggestions over time for establishing a different range of credentials, such as an early childhood credential, an early elementary grades credential, and a middle school credential. Each of these credentialing suggestions has been made in response to a need felt by a particular group to emphasize or highlight instruction to one or more specific groups of students. Sometimes these suggestions can take the form of potential legislation to establish a new credential. It would be timely for the Commission to review and weigh the various credential organizational structures and authorization options in the light of what other states do and to analyze the benefits/drawbacks of other states’ experiences.

*The key policy question to be addressed is whether California’s current credential structure and authorizations are still best suited to preparing general education teachers to meet the instructional needs of students.*

- **The Single Subject Credential Content Areas**
  
  Education Code §44257 specifies thirteen single subject areas: Agriculture, Art, Business, English, Foreign Language, Health Science, Home Economics, Industrial and Technology Education, Mathematics, Music, Physical Education, Science, and Social Science. Given the national emphasis on areas such as STEM (Science, Technology, Engineering and Mathematics), it is not clear that these single subject areas are as inclusive, focused and responsive as possible to national and state priorities for improved K-12 instruction.

  *The key policy question to be addressed is whether the thirteen single subject credential areas currently specified in state law are still best suited to preparing general education teachers to meet state and/or national priorities for improved K-12 instruction, especially but not exclusively, with respect to the STEM areas.*
• **Content and Pedagogy Preparation**

California has historically separated the content preparation needed by a prospective teacher from the pedagogical preparation to teach that content effectively to the full range of California’s K-12 students. Content preparation typically takes place at the undergraduate level while pedagogical preparation typically takes place at the graduate level, with the potential for integrating the two sequences within the blended/integrated program design option. In the typical post-baccalaureate teacher preparation program, however, content preparation is not integrated with the pedagogical preparation to teach that content since different faculty offer undergraduate content preparation than the graduate level faculty who offer pedagogical preparation. Consistent communication across the two faculties concerning the preparation needs of teacher candidates is difficult for program sponsors to foster and to maintain.

In addition, not all candidates complete subject matter content preparation through a Commission-approved subject matter preparation program. Prior to the federal No Child Left Behind (NCLB) legislation, California offered all candidates two options for meeting subject matter competency: completion of a Commission-approved subject matter preparation program or passage of the appropriate subject matter examination. Beginning in 2004 for all multiple subject candidates, California’s NCLB compliance plan requires all multiple subject candidates to pass the CSET: Multiple Subjects examination whether or not they have also completed a subject matter preparation program. Single subject candidates still have the choice of completing a Commission-approved subject matter preparation program or passing the appropriate CSET examination to meet the NCLB “Highly Qualified Teacher” requirements. Both the examination option and the program option are based on the same set of subject matter requirements. Some program sponsors, however, believe that although candidates using either route must demonstrate the same set of knowledge, skills, and abilities, the subject matter program option provides a richer set of experiences for candidates relative to the depth and breadth of their content knowledge.

All candidates, however, must complete a teacher preparation program, whether a traditional program, blended/integrated program, or an intern program, that provides content-specific pedagogy in accordance with Program Standard 8: Pedagogical Preparation for Subject-Specific Content Instruction. It is not clear if the standard requires sufficiently robust preparation to candidates across all multiple and single subject credential areas. In particular, areas with smaller numbers of candidates such as World Languages, Physics, and Art, for example, may be less comprehensive in subject-specific pedagogy preparation. In some instances, only a single general pedagogy course may be offered that includes all of the candidates from multiple lower-frequency single subject content areas.

*The key policy question to be addressed is whether pedagogical preparation to teach specific content areas is both sufficiently robust and up to date for all teacher candidates in California, and, if not, in what ways can we ensure that every candidate receives sufficient and robust subject specific pedagogy to be an effective teacher.*
Subject Matter Content
The Commission’s standards relating to the subject matter content that general education teachers must know are closely linked to the K-12 student academic content standards. Since California has recently adopted the Common Core standards, it is possible that some of the content areas may no longer be sufficiently aligned with these new standards and would need revision.

The key policy question to be addressed is whether the Commission’s subject matter content standards are still sufficiently aligned with the Common Core standards and with the current California Department of Education’s K-12 student academic content standards and curriculum frameworks, and, if not, what revisions should be made to both the related program standards and examinations.

Alternative Certification
In response to the demand for multiple entry routes to teaching, the Commission approves entities such as postsecondary institutions and local school districts/county offices of education that provide alternative certification programs for general education teachers. These programs may operate as traditional teacher preparation programs except that instead of student teaching, candidates go into the classroom as “interns” after 120 hours of preservice coursework. California requires, however, that alternative certification programs meet the multiple and single subject teacher preparation standards. Therefore, intern programs have to meet the same candidate outcomes and provide the same course inputs as traditional teacher preparation programs. At the national level, alternative certification often encourages different input requirements including residency programs, as compared to traditional teacher education programs.

The key policy questions to be addressed are (a) whether California’s approach to alternative certification meets state and local needs for multiple entry points into the profession; and (b) whether California’s approach to alternative certification sufficiently reflects an “alternative” to traditional teacher preparation while maintaining high standards.

The Relationship between Preliminary Preparation for General Education Teachers and for Special Education Teachers
General education teachers and special education teachers are required to be more collaborative than ever before in meeting the needs of diverse K-12 students. This has become particularly apparent regarding the instruction and best placement for students with Autism Spectrum Disorder. Currently the content of a number of standards in general education teacher preparation are closely aligned with the comparable standard for teachers of special education. It is important to note that changes made to standards and expectations for general education teachers will also affect the preparation of special education teachers and vice versa.

The key policy question to be addressed is whether the preparation for general education teachers and for special education teachers (a) is appropriately aligned and (b)
appropriately fosters teachers’ knowledge, skills, and abilities to collaborate successfully to meet the needs of diverse K-12 students.

- **The Relationship between Preliminary Preparation and Induction**
  In California’s conception of general education teacher preparation, the preliminary preparation phase introduces the teacher candidate to the full range of content and pedagogy needed to qualify for an initial multiple and/or single subject teaching credential, with the intended result of the candidate’s initial employment as a teacher in a public or private K-12 school. The induction phase is intended to deepen and broaden the candidate’s knowledge, skills, and abilities during the initial two years of teaching through a combination of practical experience as a teacher along with coordinated and consistent feedback personalized to the candidate’s individual needs by an experienced mentor.

  SB 1209 (Chap. 517, Stats. 2006) made several changes to the requirements for beginning teacher induction programs. As a result, Commission staff initially interpreted the revised statute (Education Code Section 44259 (C)(4)) to mean that induction programs should address application and further development of only content that had previously been included during the preliminary preparation phase. This approach was seen to meet legislative intention of avoiding potential duplication and/or repetition of coverage for candidates across the preliminary preparation and the induction sequences. Induction programs modified their approach to address “application of knowledge and skills previously acquired in a preliminary credential program, in accordance with commission standards….” as stated in the statute. Upon reexamination of the statute, however, it appears that the statute requires this approach at a minimum but still would allow for the introduction of new content as long as that content also included application of those knowledge and skills by the candidate within the program.

  The key policy question to be addressed is how to identify new content that would be beneficial to the professional growth and development of beginning teachers during the induction phase but was not necessary for the beginning teacher at the time when the preliminary credential was earned.

- **The Unit Cap**
  By law (Education Code §444259 (a)) the preliminary teacher preparation program “may not include more than one year of, or the equivalent of one-fifth of a five-year program in, professional preparation.” This limitation is known as the “unit cap.” Over time, however, there have been increasing demands to include more and more material into the preliminary teacher preparation program sequence to the point where providing a program in a one year time frame has become a challenge for many institutions and content coverage may have suffered as a result. The Commission heard a prior agenda item addressing this topic in March 2010 (http://www.ctc.ca.gov/commission/agendas/2010-03/2010-03-2D.pdf).

  It is clear that preliminary teacher preparation programs are currently maxed out in terms of the range of content required to be included. Some institutions are opting to move
content to prerequisites candidates must complete prior to entering the preparation program as a means of ensuring the sufficiency of preliminary preparation. This is an issue which will only grow in importance if more and more requirements are placed on teacher preparation programs by legislation, needs in the field, and other pressures to include content not previously part of the preparation program without sacrificing content already part of the program.

The key policy question to be addressed is whether the unit cap continues to serve the needs of general education teacher candidates, and if it does not, what could be done to address the issue.

B. Issues Relating to Teaching and Learning

In the years following the adoption and implementation of the SB 2042 standards, much has changed in the area of teaching and learning that goes beyond the content of those standards with respect to what teachers should know and be able to do. In addition, the adoption of the Common Core standards will affect K-12 teaching and learning and will soon be reflected in K-12 California frameworks. The discussion below highlights some further key content areas for potential updating.

- **Response To Intervention (RtI)**
  Response to Intervention is a multi-tiered strategy designed to assist students who demonstrate a need for improvement while these students are still in the general education classroom. It is expected that general education teachers have the appropriate knowledge, skills and abilities to provide effective instructional interventions in accordance with this model. The Commission heard a report about RtI at the January 2011 meeting (http://www.ctc.ca.gov/commission/agendas/2011-01/2011-01-2E.pdf). Current teacher preparation, however, does not include RtI within the scope of the knowledge, skills and abilities expected of candidates.

  The key policy questions are whether RtI should be included within the scope of the preliminary teacher preparation program for all general education teacher candidates, and, if so, whether additional and/or revised program standards and content in this area can be accommodated within the constraints of the unit cap as described above.

- **Data Literacy**
  In recent years, an extensive focus on student achievement has become a national preoccupation. Student outcomes are now seen as the paramount key purpose and product of schooling. Further, the NCLB legislation and its attendant schema relating to the ratings and classifications of schools according to specified improvement targets have become a critical issue for teachers, students, districts, local and state governments in the years since the SB 2042 standards reform. There are several aspects to understanding data sufficiently to promote its effective use for the improvement of teaching and student learning. Since the Commission’s purview relates primarily to the preparation of educators, it is appropriate for the Commission to look at all of the parameters of data literacy for educators and how these are incorporated within the preparation of general
education teachers as well as those who may also serve as teacher leaders in a variety of contexts.

Within this discussion, the term “data literacy” refers to all of the following: (a) knowledge of the qualities of standardized assessments, including reliability and validity of the assessment(s) for their intended purposes; (b) knowledge of appropriate and inappropriate uses of outcomes data stemming from standardized assessments for instructional improvement and/or program improvement purposes as applicable; (c) knowledge of the qualities of non-standardized teacher-developed assessment instruments, including the ability to develop appropriate test formats, questions, directions, scoring, and feedback to students along with the knowledge of appropriate use of outcomes data for instructional improvement purposes; (d) understanding of the NCLB and the California systems of school ratings, rankings, improvement targets, and instructional planning to meet those targets; and (e) knowledge or/and ability to apply the interpretation and use of school-wide outcomes data for grade level/content level instructional improvement purposes.

Given the unprecedented role that data in all its forms and reporting formats now play in public education, it is not clear that preliminary general education teacher preparation programs are sufficiently robust in preparing candidates to be literate consumers, analyzers and users of a wide variety of educational data, including both standardized tests and state assessments, along with the ability to develop, administer, and interpret appropriately student outcomes for classroom-based, teacher developed tests.

The key policy question to be addressed is whether general education teacher preparation programs are sufficiently robust in preparing data literate general education teachers, and, if not, whether additional and/or revised program standards and related content in this area can be accommodated within the constraints of the unit cap as described above.

- **Mathematics Pedagogy Content for Elementary Teachers**
  The Commission has heard several agenda items over the past two years concerning the need to improve mathematics outcomes for K-12 students, with an emphasis on the need to ensure that elementary students receive a solid foundation in mathematics knowledge and skills. At its meeting of June 2009 ([http://www.ctc.ca.gov/commission/agendas/2009-06/2009-06-6E.pdf](http://www.ctc.ca.gov/commission/agendas/2009-06/2009-06-6E.pdf)), the Commission heard a presentation from a national mathematics expert that included examples of updated mathematics pedagogy. The Teaching Mathematics Advisory Panel, which completed its work last year, also made recommendations concerning improvements to mathematics pedagogical preparation for general education multiple subject teachers ([http://www.ctc.ca.gov/commission/agendas/2010-06/2010-06-5D.pdf](http://www.ctc.ca.gov/commission/agendas/2010-06/2010-06-5D.pdf)). It is timely now to look at incorporating those recommendations into the preparation standards for general education teachers.
The key policy question to be addressed is how the recommendations of the Mathematics panel should be incorporated within the general education teacher preparation standards.

- **English Learner-related Content and Preparation for General Education Teachers**
  The Commission took action at its August 2010 meeting ([http://www.ctc.ca.gov/commission/agendas/2010-09/2010-09-2E.pdf](http://www.ctc.ca.gov/commission/agendas/2010-09/2010-09-2E.pdf)) to approve changes to the authorizations structure for multiple and single subject teachers with respect to teaching English learners. As a result of the Commission’s action, both the multiple and the single subject preparation standards will need to be revised to included the recommended updated content, especially the focus on “academic language” and “academic literacy” across the curriculum. In addition, an advisory panel will be working during 2011 on developing the set of knowledge, skills, and abilities that will underlie the new single subject World Language/English Language Development credential. Some of this content may also need to be reflected in the single subject preparation standards. Finally, the panel will also address standards needed for a new English Learner Specialist authorization which general education teachers might also choose to earn. Some of this work as well may need to be reflected in the general education teacher preparation standards.

There is a related issue raised by the required inclusion under SB 2042 of what was formerly separate and/or optional preparation to teach English Learners (i.e., the CLAD emphasis and other related preparation such as that required by AB 1059) into the preparation of all multiple and single subject candidates. It is not clear that the content of the English Learner preparation provided within the SB 2042 multiple and single subject preparation programs is as robust as that covered through the California Teachers of English Learners (CTEL) programs or examination. This issue is also related to that of the unit cap and whether more robust content in this area can be successfully included by programs under the present unit cap.

The key policy questions to be addressed are (a) how best to incorporate the work of the English Learner Authorization Advisory Panel into the revised/updated general education teacher preparation program standards; (b) how best to transition general education teacher preparation programs to the new multiple and single subject English learner authorizations structure as adopted by the Commission in August 2010; and (c) whether the content of the multiple and single subject preparation programs with respect to English Learners should be made more robust and parallel with the CTEL content requirements, and, if so, whether that content could be accommodated under the unit cap.

- **Science, Technology, Engineering, and Mathematics**
  In recent years there has been both a federal and a state push towards improving Career Technical Education (CTE) along with Science, Technology, Engineering, and Math (STEM) outcomes for general education students. The Commission has heard several presentations on these topics ([http://www.ctc.ca.gov/commission/agendas/2010-12/2010-12-1G.pdf](http://www.ctc.ca.gov/commission/agendas/2010-12/2010-12-1G.pdf)). Newspaper articles regularly are published on this topic and it has been the subject of recent reports from the Center for the Future of Teaching and Learning. It is
not clear that the current general education teacher preparation program standards are sufficiently robust when it comes to preparing general education teachers to incorporate enhanced instruction in these content areas. Also included within this topic is “Linked Learning.” Linked Learning is the new name for the educational approach formerly known in California as “multiple pathways.”

A related issue is the difference in preparation requirements between single subject teachers of STEM subjects such as mathematics and science, and teachers of engineering, technology, and other “Designated Subjects.” The math and science credential candidates must fulfill all of the SB 2042-related subject matter and pedagogy requirements, whereas the Designated Subjects candidates use work experience to qualify for the Preliminary teaching credential and then complete a more limited preparation program to earn a Designated Subjects credential.

The key policy questions to be addressed are (a) whether the current general education teacher preparation standards are sufficiently robust in the areas of STEM and Linked Learning, and, if not, how additional and/or revised program standards and content in these areas can be accommodated within the constraints of the unit cap; and (b) whether the disparity in the requirements for candidates earning a single subject credential in mathematics or science as compared to those earning a Designated Subjects credential in areas such as engineering or technology should be addressed.

C. National Teacher Preparation Reform Efforts

There have been several national reports and concomitant groups proposing reforms of teacher preparation in general. One such model which is gaining national momentum is that of emphasizing the clinical practice component along with extensive field experiences for preliminary teacher preparation. The Commission heard an agenda item presented by a representative from NCATE, the national accrediting body for teacher preparation institutions, at its January 2011 meeting (http://www.ctc.ca.gov/commission/agendas/2011-01/2011-01-1G.pdf) and also discussed California’s current requirements related to clinical practice (http://www.ctc.ca.gov/commission/agendas/2011-01/2011-01-1H.pdf). Several California institutions, including the California State University system, have signed on to this initiative.

NCATE also has an additional national effort focused on helping teachers understand the developmental nature of children and adolescents and the relationship of these factors to student achievement. The report, The Road Less Traveled provides policy recommendations. Given the significant level of interest in reform-based approaches to teacher preparation, it would be appropriate to consider if these types of efforts should be addressed within the Commission’s general education teacher preparation standards.

The key policy question to be addressed is whether the clinical practice model, and/or any other national reform model, should be addressed within the general education teacher preparation program standards.
D. Other Issues

- **Online Teaching**
  Online teaching has become increasingly common in multiple contexts in the years since the SB 2042 standards were developed. It is not clear if a new set of KSAs (Knowledge, Skills, and Abilities) needs to be defined and potentially incorporated into the credentials structure for K-12 teacher candidates (such as, for example, a new or added authorization for online teaching or in the general teacher preparation program). The Professional Services Division has within the past month received an inquiry from the state of Oklahoma, which is looking at the possibility of an Online Instructor certification for the state, regarding other states’ policies for preparing and certifying online teachers. Responses seen thus far to the survey from other states have indicated a range of options from no related requirements to required preparation but not required authorization, to full authorization in online teaching.

  The key policy question to be addressed is whether online teaching should be incorporated into the set of knowledge, skills, and abilities that preliminary general education teacher preparation programs should develop in candidates, and, if so, whether additional and/or revised program standards and content in this area can be accommodated within the constraints of the unit cap as described above.

- **Professional Conduct for California Credential Holders**
  Although the Division of Professional Practices within the Commission is responsible for educator discipline, general education teacher preparation programs prepare teacher candidates to understand the nature and scope of their professional responsibilities and the expected professional conduct required of a California credential holder. Given the growing disciplinary workload with respect to credential holders (http://www.cte.ca.gov/commission/agendas/2010-12/2010-12-2A.pdf), it is not clear that the current teacher preparation program standards are sufficiently robust in this area, or whether this is an area more appropriately addressed during induction.

  The key policy questions to be addressed are (a) whether the area of professional conduct expectations should be addressed within preliminary teacher preparation, induction, or both, and (b) regardless of where this area will be addressed, whether the applicable standards are sufficiently robust with respect to preparing candidates for their professional conduct responsibilities as educators.

The issues identified in this agenda item are ones that staff has identified to date. If after reviewing the issues, the Commission would discuss any additional issues that should be added to the list. This agenda item and its issues would be one of the reference documents used by an advisory panel focusing on the preparation of general education teachers.
Next Steps
This agenda item has raised a significant number of issues relating to the rationale for updating the current standards for general education teacher preparation, and has provided several possible areas of future focus for this work. Given the range of policy issues that need to be thoroughly worked through, staff suggests that a General Education Teaching Advisory Panel be established.

The members of this Panel would, in accordance with Commission policy, be appointed by the Executive Director following an open application process. The work of the expert panel would assist the Commission regarding what type of credential structure and authorizations are needed for the preparation of general education teachers to assure that California continues to maintain educator excellence in the future. If the Commission so directs, staff will present a plan at the June 2011 Commission meeting that will include a description of the panel application and selection process as well as the charge to the panel.