
4C

Action

Professional Services Committee

Proposed Adoption of Revised CSET: Multiple Subjects, Single Subject English, and Single Subject Mathematics Subject Matter Requirements (SMRs) to Align with the California Common Core State Standards

Executive Summary: This item provides the draft revised Subject Matter Requirements (SMRs) for the CSET: Multiple Subjects, Single Subject English and Single Subject Mathematics examinations in alignment with the Common Core State Standards (CCSS) to the Commission for potential adoption. The SMRs have undergone a content validation study since initial presentation to the Commission in March 2013.

Policy Question: Do the proposed revisions to the selected subject matter requirements adequately and appropriately address alignment with the California Common Core State Standards?

Recommended Action: That the Commission adopt the draft revised SMRs as presented in this agenda item.

Presenters: Phyllis Jacobson, Administrator, and Mike Taylor, Consultant, Professional Services Division

Strategic Plan Goal

II. Program Quality and Accountability

- ◆ Develop and maintain rigorous, meaningful, and relevant standards that drive program quality and effectiveness for the preparation of the education workforce and are responsive to the needs of California's diverse student population.

June 2013

Proposed Adoption of Revised CSET: Multiple Subjects, Single Subject English, and Single Subject Mathematics Subject Matter Requirements (SMRs) to Align with the California Common Core State Standards

Introduction

This item provides the revised Subject Matter Requirements (SMRs) for the CSET: Multiple Subjects, Single Subject English and Single Subject Mathematics examinations in alignment with the Common Core State Standards (CCSS) to the Commission for potential adoption. SMRs define the content knowledge expected at the level of a beginning California teacher earning a preliminary credential. These SMRs were presented to the Commission for initial review in March 2013 and have undergone a Content Validation study during April-May 2013.

Background – the SMR Revision Process

At the December 2012 Commission meeting, an update was provided on the work in progress relating to implementing the Common Core State Standards (<http://www.ctc.ca.gov/commission/agendas/2012-12/2012-12-4C.pdf>). Included in the update was a description of the process to revise and update the CSET: Multiple Subjects, Single Subject English and Single Subject Mathematics examinations to align with the CCSS.

On February 4, 2013, the Commission's standing Bias Review Committee (BRC) met to review the proposed revisions to determine if any of the proposed revisions posed issues of bias. Comments from the Bias Review Committee are forwarded to the Content Expert panels, which are required to address any substantive issues identified by the BRC. On February 5, 2013, the Content Expert panel members participated in a Common Core State Standards Alignment Objective Review Conference held at the facility of the Commission's CSET contractor, Evaluation Systems group of Pearson. Because this was a test development activity, the names of the participants are not made public; however, a description of the panel members for each of the three CSET content areas is provided in Appendix A.

Orientation activities focused the panel members on the objective of the meeting to align the current CSET: Multiple Subjects, Single Subject English and Single Subject Mathematics Subject Matter Requirements with the California Common Core State Standards. Participants were reminded that the SMRs define the content knowledge expected at the level of a beginning California teacher earning a preliminary credential. A summary of those conference proceedings is provided below.

Common Core State Standards Alignment Objective Review Conference Outcomes

CSET: Multiple Subjects Proposed Revisions

The CSET Common Core State Standards Alignment Objective Review Conference for the Multiple Subjects Content Standards included a panel of eleven educators with expertise in the range of the Multiple Subjects subject matter content participated in the meeting.

Panel members were tasked to evaluate the current Multiple Subject SMRs to determine their alignment with the CCSS. The panel reviewed content specifications for Reading, Language, and Literature, which included content domains for Language and Linguistics, Non-Written and Written Communication, and Texts. The panel also reviewed the Subject Matter Skills and Abilities in Mathematics because the CCSS address mathematical problem solving, reasoning and proofs, communication, representation, and connections. Additionally, the panel reviewed content specifications for Subject Matter Skills and Abilities in History and Social Science and Science because the CCSS have identified literacy implications in these subjects and these content areas.

After an initial review of the current Multiple Subject content specifications, which included draft CCSS language, there was a discussion regarding the level of content knowledge needed by an entry-level teacher candidate. Panel members expressed concerns with the clarity of and/or familiarity that candidates might have with selected terminology used in the standards. As a result, selected vocabulary was added to the list of Glossary of Specialized Terms (see page 6 of the draft CSET: Multiple Subjects SMRs).

The panel also emphasized that the current SMRs did not address academic English and technology as extensively as the CCSS. Revisions of the current standards were made to include academic English and the use of technology as appropriate to the specific content domains.

The proposed revised SMRs for the CSET: Multiple Subjects examination are provided in Appendix B (to be provided as an agenda insert prior to the Commission meeting).

CSET: Single Subject English Proposed Revisions

The CSET Common Core State Standards Alignment Objective Review Conference for the Single Subject English Content Standards included a panel of eleven educators with expertise in Single Subject English.

The panel members focused primarily on adding content reflective of three key English-related areas characteristic of Common Core State Standards: an emphasis on varied types of writing and of student writing across the curriculum; an emphasis on critical analysis of literary and other works and the application of that analysis to other curriculum areas (for example, relating historical contexts for literary works and the author's relationship to that context); and student access to reading and experiencing a broad range of texts, including informational, literary, and media-related, as well as texts and media illustrative of a range of complexity.

With respect to the area of Dramatic Performance, the panel included a draft new content objective relating to the analysis of dramatic works so that candidates would be required to

analyze the work and provide textual evidence for informing play production values such as direction, lighting, and other dramatic elements (proposed new objective 4.3 (c)).

The proposed revised SMRs for the CSET: Single Subject English examination are provided in Appendix C (to be provided as an agenda insert prior to the Commission meeting).

CSET: Single Subject Mathematics Proposed Revisions

The CSET Common Core State Standards Alignment Objective Review Conference for the Single Subject Mathematics Content Standards included a panel of ten educators with expertise in Single Subject Mathematics content.

Panel members reviewed the adopted SMRs for secondary mathematics to determine their appropriateness for describing the content knowledge required of a beginning secondary mathematics teacher charged with teaching the CCSS. Panel members discussed each domain in great detail, discussing the relevance of each statement to the task at hand. The panel recommended fairly extensive revisions, including the addition of new sections, changing the name of at least one domain to reflect the added content, and the elimination of one domain, History of Mathematics.

The proposed revised SMRs for the CSET: Single Subject Mathematics examination are provided in Appendix D (to be provided as an agenda insert prior to the Commission meeting).

At the March 2013 Commission meeting (<http://www.ctc.ca.gov/commission/agendas/2013-03/2013-03-3C.pdf>), the proposed revised SMRs were presented for initial review and discussion. At that time, the Commission approved proceeding to conduct a Content Validation study of the proposed revisions.

Statewide Content Validation Survey of the Revised Draft CSET Subject Matter Requirements

Since the March 2013 Commission meeting, Evaluation Systems has completed the statewide survey to determine if California educators consider the revised draft CSET subject matter requirements valid for the content knowledge expected of a preliminary Multiple Subject, Single Subject English or Single Subject Mathematics candidate, as applicable. The content validation survey targeted two main groups of California educators: teachers and subject matter program faculty. Their responses served to help refining the recommended draft CSET Subject Matter Requirements being presented to the Commission for adoption.

With the assistance of California employers, institutions, and teacher unions, Evaluation Systems distributed this survey to over 8,000 educators reflecting the state's ethnic diversity, school population areas (urban, suburban, and rural), and school types (preschool, elementary, middle school, secondary, and adult education). Prior to opening the survey period, Evaluation Systems requested the superintendent of every district and county office of education as well as the dean of education and, for alternative certification programs, the program directors of each institution with approved programs to encourage their staff to complete the survey. Thus, invitations to participate in the statewide survey were initially distributed to the following:

- Every district and county administrator identified in the California Department of Education’s database, the California Basic Educational Data System (CBEDS).
- Each teacher educator in Commission-accredited Multiple Subject and Single Subject (for English and Mathematics) subject matter programs whose email was available from the institution’s website or, when these websites did not include this information, those identified by their dean or program director. In addition, members of the CSU English Council also received an invitation to participate in the survey.

Because of the initial low number of survey responses, Evaluation Systems sent follow-up emails and made numerous phone calls to potential responders.

The survey asked individuals to respond to the various aspects of the applicable CSET Subject Matter Requirements, both individually and as a whole. The following lists the content validation survey’s specific questions with their respective rating scale range:

- With respect to the subdomains: *“How important are the knowledge, skills, and abilities indicated by this subdomain for performing the job of an entry-level educator in this field in California public schools?”* Rating scale: one = “no importance” to five = “very great importance.”
- With respect to the set of competency statements: *“How well does the set of competency statements above represent important aspects of the knowledge, skills, and abilities addressed by the subdomain?”* Rating scale: one = “poorly” to five = “very well.”
- With respect to the subdomains as a whole: *“How well does the set of subdomains, as a whole, represent important aspects of the knowledge, skills, and abilities required for acceptably performing the job of an entry-level California public school teacher providing instruction authorized by the <Credential>?”* Rating scale: one = “poorly” to five = “very well.”

In addition to the three specific survey questions, the respondents were also given an opportunity to provide feedback about the draft CSET subject matter requirements, particularly for any low ratings they may have given.

Final Draft CSET Subject Matter Requirements for Commission Adoption

Because of the close timing between the Content Validation Survey and the agenda deadline for the June 2013 Commission meeting, the final draft version of the CSET Subject Matter Requirement for the Multiple Subject, Single Subject English, and Single Subject Mathematics examinations for the Commission’s approval will be provided in an agenda insert. However, the preliminary analysis of the survey responses shows support for the SMRs with only minimal suggestions for wording changes. The agenda insert will provide the original CSET Subject Matter Requirements as presented at the March 2013 Commission meeting showing any changes delineated with a strikethrough for deleted wording and underlining for new wording, thereby making any changes readily apparent.

Next Steps in the Revision of the Item Bank for the CSET Multiple Subjects, Single Subject English, and Single Subject Mathematics Examinations

If the Commission adopts the revised CSET Subject Matter Requirements as presented in the agenda insert, the standard Commission process for examination development will continue based on the adopted SMRs. This process includes: developing a revised and augmented item bank which allows sufficient operational items for year-round computer-based testing and conducting standard setting studies to help determine a recommended minimum passing score. The recommended passing score standards will be brought to the Commission for adoption following the initial administrations of these three examinations.

Some Commissioners have expressed an interest in looking at the relationship between the types of items on these three subject matter examinations and the types of items being proposed for the new K-12 Smarter Balanced assessments. To that end, staff has had some exploratory conversations with the Commission's CSET examinations contractor. Appendix E contains a preliminary analysis of the item types and testing parameters for the Smarter Balanced Assessments done by the contractor.

Within the item development and review process, staff and the content expert panel will look at the question of the rigor of the examination questions and assure that new questions are aligned appropriately with content-related depth, breadth and development of conceptual understanding of key academic content within the field. Over time, the entire item bank for these examinations will be reviewed to ensure alignment with these considerations as well as with the Common Core State Standards.

Congruence of Subject Matter Requirements Between Examinations and Program Standards

There is a related issue of the congruence between the content of the subject matter examination and the focus of subject matter programs, since the candidate competencies expected within both approaches should be the same. The respective subject matter program standards that incorporate the SMRs will also be revised to be congruent and revised standards will be brought to the Commission for adoption in the future.

Staff Recommendation

Staff recommends that the Commission adopt the draft revised CSET: Multiple Subjects, Single Subject English and Single Subject Mathematics Subject Matter Requirements, as presented in the agenda insert.

Next Steps

The next phases of the work relating to Common Core State Standards is (a) to align examinations and program standards to new standards now coming on line such as the Next Generation Science Standards, and (b) to complete the work of aligning the Single Subject core content areas of Science and History-Social Science with the literacy components of the California Common Core State Standards.

Appendix A Composition of the Subject Matter Advisory Panels

CALIFORNIA SUBJECT EXAMINATIONS FOR TEACHERS® (CSET®)
ENGLISH
MATHEMATICS
MULTIPLE SUBJECTS

SUBJECT MATTER ADVISORY PANELS

	English	Mathematics	Multiple Subjects	Total
Total Number				
Participants	11	10	11	32
Ethnicity				
African American or Black	1	1	0	2
Asian American	0	0	2	2
Filipino	0	1	0	1
Southeast Asian American	0	0	0	0
Pacific Island American	0	0	0	0
Mexican American / Chicano	0	1	1	2
Latin American / Other Hispanic	0	0	0	0
White (non-Hispanic)	7	4	8	19
Other	0	0	0	0
Did Not Indicate	3	3	0	6
Gender				
Female	10	5	9	24
Male	1	5	2	8
Region				
North	3	1	6	10
South	8	9	5	22
Profession				
Public School Educator	6	5	8	19
College/University Educator	3	5	2	10
Other	2	0	1	3

Appendix E
Preliminary Analysis of PARCC and Smarter Balanced Assessments

(note: this analysis was provided by Pearson)

	PARCC	Smarter Balanced
Startup Funding	\$186 million grant from the U.S. DOE	4 year, \$175 million grant from the U.S. DOE, comprising 99% of resources; remaining support provided by charitable foundations
Testing Fees Per Pupil	Unknown	The projected per pupil cost for the summative assessment is \$19.81, while the interim assessments are expected to cost \$7.50—for a total of \$27.31 per student.
Purposes	To measure and report on student progress toward meeting the CCSS (not mastery of)	
	To provide results that measure student performance and growth over time (to enable evaluation of teacher and principal effectiveness)	
	Many colleges and universities have signed on to ultimately use these tests as college placement tools.	--
Research	<p>Grounded in cognitive development theory about how learning progresses across grades and competence develops over time (NRC, 2001; Pellegrino, 2006; Stiggins, 2002), the assessments will (a) work in concert with the summative assessment, (b) allow for more innovative and fine-grained measurement of student progress toward the CCSS (Shepard, Hammerness, Darling-Hammond, & Rust, 2005), and (c) provide diagnostic information that can help tailor instruction and guide students in their own learning efforts. While a rigorous summative assessment is essential, it is insufficient to drive positive change in teaching and learning. Interim/benchmark (I/B) and formative assessments are the other necessary assessment ingredients to drive teaching and learning (Darling-Hammond & Pechone, 2010). Assessments must reflect the challenging CCSS content, emphasizing not just students’ “knowing,” but also “doing.</p>	
Timelines for Roll-out	2013-2014: Field testing Fall 2014: Optional assessments available Spring 2015: First operational administrations of required assessments	

Delivery Mode	The assessments are to be delivered on computer and utilize technology to increase access and student engagement.	
	CBT States can allow PBT for some schools.	CAT
Blueprints (to date)	http://www.parconline.org/assessment-blueprints-test-specs	http://www.smarterbalanced.org/wordpress/wp-content/uploads/2011/12/Smarter-Balanced-Preliminary-Test-Blueprints.pdf
Sample Items	http://parconline.org/samples/item-task-prototypes#2	http://www.smarterbalanced.org/sample-items-and-performance-tasks/
Testing Time	Total testing time for both summative components and subjects is expected to be 8–9.5 hours, depending on the grade level.	Total testing time for both summative components and subjects is expected to be 7–8.5 hours, depending on the grade level.
Optional Assessment Components	<p>1) Diagnostic assessment: Designed to return useful information concerning student knowledge and skills so that instruction, support and professional development can be tailored to student needs.</p> <p>2) Mid-year assessment: Performance tasks to useful feedback and prepare students for the performance tasks in the summative assessment. Tasks will focus on hard-to-measure standards and will be scored by teachers via an online tool.</p>	<p>Optional interim assessments: Computer-adaptive assessments can be customized to local curricula and information needs. Can assess either the full set of grade-level standards or a smaller set of standards at a deeper level. Teachers will have access to items and student responses. Reports will link teachers to appropriate formative strategies and professional development resources.</p>
Required, Summative Assessment Components	<p>1) Performance-Based Assessments: Primarily performance tasks taken over several sessions/class periods. The 3 ELA tasks (research simulation, literary analysis, and narrative task) will focus on writing effectively when analyzing text. For each task, students will be asked to read one or more texts, answer several short comprehension and vocabulary questions, and write an essay that requires them to draw evidence from the text(s). The 2 or</p>	<p>1) Performance Tasks (PT) will be completed annually (one in ELA/literacy and one in math) during consortium-defined testing windows. Tasks will generally require 90–120 minutes to complete and will focus on hard-to-measure standards and real-world scenarios.</p> <p>2) Computer Adaptive Assessments (CAT) will consist of approximately 40–65 questions per content area and include selected-response, constructed-response and technology-enhanced items. Most items will be scored immediately, although some teacher/human scoring may</p>

	<p>more math tasks will require students to use key math concepts to solve real-world problems. Scores to be returned within two weeks.</p> <p>2) End-of-Year Assessments: These comprehensive, computer-based assessments will consist of innovative, machine-scorable item types. High School: both traditional and integrated math sequences will be supported; and in ELA, literacy skills in ELA, science and social studies will be assessed, as defined in the CCSS.</p>	<p>be included. A retake option will be available, as locally determined.</p>
Scoring	<p>Scores for the two summative components will be combined for the student’s annual accountability score.</p>	<p>Final scores to be used for accountability purposes will merge PT and CAT scores and be reported on a vertical scale in grades 3–11. Both machine and teacher scoring will be used, with results to be returned within two weeks.</p>
Retake Policy	--	<p>One retake opportunity for grades 3–8 and up to three retakes for high school will be available, subject to local approval.</p>
Shifts to Align to CCSS	<p>ELA</p> <ol style="list-style-type: none"> 1. Complexity: standards require regular practice with complex text and its academic language 2. Evidence: standards emphasize reading and writing grounded in evidence from text, both literary and informational 3. Knowledge: standards require building knowledge through content rich non-fiction <p>Math</p> <ol style="list-style-type: none"> 1. Focus: standards focus in on the key content, skills and practices at each grade level 2. Coherence: Content in the standards builds across the grades, and major topics are linked within grades 3. Rigor: In major topics, standards highlight conceptual understanding, procedural skill and fluency, and application 	

http://www.k12center.org/rsc/pdf/22016_parcc_smarter_balance_spring_2013.pdf

<http://www.smarterbalanced.org>

<http://parconline.org>

http://www.k12center.org/rsc/pdf/Coming_Together_April_2012_Final.PDF

<http://www.smarterbalanced.org/wordpress/wp-content/uploads/2012/02/Smarter-Balanced-Theory-of-Action.pdf>