Executive Summary: This agenda item presents draft Preliminary Teacher Preparation Program Standards, a transition plan, and the draft Teaching Performance Expectations (TPEs). The Commission may review, revise and/or adopt the preliminary program standards. The draft TPEs are presented for review and approval to begin a validity study of the TPE’s.

Policy Question: Do the draft program standards and the draft Teaching Performance Expectations align with the Commission’s expectations?

Recommended Action: Staff recommends that the Commission (1) review and adopt the draft Preliminary Multiple and Single Subject Teacher Preparation Program Standards and transition plan; and (2) approve the version of the draft Teaching Performance Expectations for the validity study.

Presenters: Teri Clark, Director, Professional Services Division and Amy Reising, Director of Development for Teacher and Administrator Performance Assessments

Strategic Plan Goal

II. Program Quality and Accountability

a) 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.

December 2015
Adoption of Draft Preliminary Multiple and Single Subject Teacher Preparation Program Standards and Approval of Draft Revised *Teaching Performance Expectations* (TPEs)

**Introduction**
This agenda item presents draft revised Preliminary Teacher Preparation Program Standards and the draft revised *Teaching Performance Expectations* (TPEs). The Commission may review, revise and/or adopt the preliminary program standards. The draft TPEs are presented for review and approval as a draft in preparation for a validity study.

**Background**
The current adopted Preliminary Program Standards for Multiple and Single Subject programs include nineteen standards that define the curriculum that must be provided to candidates, the types of field experiences candidates must complete, including learning about, practicing and demonstration the Teaching Performance Expectations, as well as the program’s responsibility for implementing a teaching performance assessment.

The Preliminary Program Standards Work Group began meeting in December 2014 with the responsibility for reviewing and proposing updates to the General Education Preliminary Program Standards and the *Teaching Performance Expectations*. Concurrent to the work of the work groups on strengthening and streamlining the accreditation system, a Statewide Special Education Task Force was convened.

Acting on the direction of the Commission to streamline and strengthen preparation standards, the Preliminary Standards Work Group focused the standards revision on candidate and program outcomes rather than prescribing the range of program inputs. As a result, the Work Group is recommending adoption of six program standards. An example of the revisions to these standards is the modification of the standard relating to Clinical Practice. Since the Commission identified clinical practice as a key component of teacher preparation and directed that the minimum requirements for clinical practice be clarified and strengthened, proposed Program Standard 3 is specific in addressing this component.

Informed in part by the work of the Special Education Task Force, the Preliminary Standards Work Group proposes to strengthen preparation for general education teachers to work more effectively with students with disabilities in the general education classroom. One of the ideas surfaced by the Special Education Task Force is that the Commission consider creating a “common trunk” of preparation that all teachers, both general and special education. This topic is taken up more fully in item 2B on this agenda.

The organization of the proposed standards for Preliminary Multiple and Single Subject Teacher Preparation is outlined below. The complete text of the proposed draft standards is provided in Appendix A.
Standard One: Program Design and Curriculum

Standard Two: Preparing Candidates to Master the Teaching Performance Expectations

Standard Three: Clinical Practice
   A. Organization of Clinical Practice Experiences
   B. Criteria for School Placements
   C. Criteria for the Selection of Program (University) Supervisor
   D. Criteria for the Selection of District-Employed Supervisor

Standard Four: Monitoring, Supporting and Assessing Candidate Progress toward Meeting Credential Requirements

Standard Five: Implementing the Teaching Performance Assessment
   5A Program Administration of the Teaching Performance Assessment (TPA)
   5B Candidate Preparation and Support
   5C Assessor Qualifications, Training, and Scoring Reliability

Standard Six: Clear/Induction Transition Plan

Transition Plan for the Revised Program Standards
If the Commission adopts revised General Education Preliminary Program Standards at its December meeting, currently-approved programs will need time to learn about and understand the revised standards and make changes to their programs. Staff suggests that the remainder of the 2015-16 year be focused on supporting programs in gaining a deep understanding of the revised Preliminary Standards. During 2016-17 programs would move to the revised standards and beginning in 2017-18, all programs would be required to meet the revised program standards. A Commission-approved program could elect to move to the revised standards more quickly than the Transition Plan requires.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timeline</th>
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<tr>
<td>Commission adopts revised Preliminary Program Standards</td>
<td>December 2015</td>
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<tr>
<td>Technical Assistance is provided to programs to understand the revised Preliminary Program Standards</td>
<td>January 2016-December 2016</td>
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<tr>
<td>TPEs return to the Commission for adoption after the validity study</td>
<td>June 2016</td>
</tr>
<tr>
<td>Transition Document is due to the Commission</td>
<td>March 2017</td>
</tr>
<tr>
<td>Technical Assistance is provided to programs as they transition to the revised Preliminary Program Standards</td>
<td>August 2016-June 2017</td>
</tr>
<tr>
<td>All programs are aligned with the revised Preliminary Program Standards</td>
<td>September 2017</td>
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Draft Revised Teaching Performance Expectations
Teaching Performance Expectations (TPEs) form the foundation of what teachers new to the profession should know and be able to demonstrate at the point of initial licensure. The TPEs play an integral role in determining the design and delivery of teacher preparation program curriculum
and fieldwork experiences for candidates. Consistent with statute, Commission-approved Teaching Performance Assessments (TPAs) measure TPEs and are expected to provide critical and detailed feedback that a newly prepared teacher needs to improve and enhance his/her teaching practice.

The first set of TPEs developed by the Commission, based on the *California Standards for the Teaching Profession* (CSTP), was adopted in 2001 following a comprehensive job analysis and study to determine its validity as a set of expectations for teacher knowledge and skill at the point of entry into teaching. Adjustments to the original draft have been made over the ensuing years in response to policy or changing conditions in schools. Most recently (2013), the TPEs were updated to ensure alignment with the California Common Core State Standards (http://www.ctc.ca.gov/educator-prep/standards/adopted-TPEs-2013.pdf).

As the Commission moved to strengthen and streamline its accreditation system, update preparation standards and improve performance assessments, it was necessary to conduct a deeper review of the TPEs to ensure that as a whole, they reflected the field’s evolving set of expectations for teacher knowledge and ability. Beginning in fall 2014, the Commission’s Preliminary Standards Work Group was tasked with conducting this review. The group worked with Commission staff to eliminate redundancies, streamline and reorganize TPEs, with detailed criteria framing essential knowledge, skills, and abilities in each domain. The group proposed the following new areas of focus:

- the use of emerging technology to enhance instruction;
- integrating the use of visual and performing arts across content areas to support teaching and learning;
- updated approaches to classroom management that support social and emotional learning;
- developing students’ critical, creative, and analytic thinking required to be college and career ready; and
- more emphasis on candidate ability to work effectively with special with disabilities in the general education classroom, implementing approaches such as Universal Design principles, Multi-Tiered Systems of Support, and co-teaching.

Draft revised TPEs were presented to the Commission at its June 2015 meeting (http://www.ctc.ca.gov/commission/agendas/2015-06/2015-06-5D.pdf). The Commission requested modifications to the draft and directed staff to work with the co-chairs of the Preliminary Standards and Performance Assessment Work Groups and collect feedback from California educators about a revised draft. Between May 30 and September 30, 2015, Commission staff circulated a survey with the revised TPEs to stakeholders for feedback.

In general, respondents noted that the language was clear in most of the draft TPEs, and that the draft TPEs represented necessary knowledge and skills for a beginning teacher. A minority of respondents also indicated their view that some content, such as restorative justice concepts and issues related to student emotional health, were either missing or needed additional emphasis within the draft standards.
In August and September, Commission staff met with the chairs of the Preliminary Standards Work Group and the Performance Assessment Work Group to address feedback from the field and continued to refine the draft TPEs.

The set of TPEs presented to the Commission in June 2015 and circulated for field review between May and September 2015 included 43 specific expectations that align with of the CSTPs. These elements captured the essence of the Teaching Performance Expectations (TPEs) that were presented to the Commission in June 2015, but were revised to describe practice for all new teachers and eliminate redundancies.

At the October 2015 Commission meeting, the restructured draft of the TPEs was presented for review and endorsement as a draft so that staff could move forward with a validity study. Upon review and after hearing public input, the Commission directed staff to gather more input from the public and continue to revise the TPEs prior to moving to a validity study.

The Commission and some of its stakeholder groups have expressed interest in having one unified set of standards that would guide initial preparation, induction and ongoing development of teachers, rather than variations for beginning teachers that differ from standards that guide induction and ongoing development. One of the ideas being discussed is if and how this revised set of TPEs might inform an update to the CSTPs that advances the idea of a single, unified set of standards for the teaching profession. The idea that these TPEs could inform an update to the CSTP was raised during and after the October 2015 Commission meeting and generated both excitement and confusion in the field. How the TPEs relate to the CSTP is an important question that needs to be fully explored with the Commission, teachers, employers and other stakeholders. Moving forward with combining these two documents is not a proposal at this time; it is, rather, an idea that needs to have further conversation with the field. Staff will continue to explore this idea more fully with stakeholders and provide updates at future Commission meetings.

Following the October Commission meeting, two public meetings were conducted on October 28, in Sacramento, and on November 16, in San Marcos to continue to gather feedback and input in relation to the TPEs. In addition to public meetings, staff talked with several constituent groups including CTA, PASSCO, Children Now, the California Endowment, Computer Using Educators (CUE), and with teacher educators, teachers and administrators attending the California Council on Teacher Education fall conference held in San Diego. The draft TPEs have been updated to include feedback generated at these meetings.

**Organization of the Revised Draft Teaching Performance Expectations**

Based on conversations with the co-chairs of the Commission’s work group and on further input from the field through meetings and correspondence, staff have organized the TPEs into three sections: (1) TPE Elements and Narratives, (2) Subject Specific Pedagogy, and (3) Glossary and Resources.

Section 1 presents the draft teaching performance expectations, with specific, measureable elements and narratives organized under each of the six CSTP domains. Organizing the TPEs explicitly around the domains of the CSTP responds to requests from the field to strengthen and align the transition from pre-service to Induction. By using the CSTP domains as an organizer for
the TPEs, candidates, teacher preparers, and educators involved with Induction can see the direct and purposeful link between preliminary teacher preparation and Induction. TPE elements and narratives describe what beginning teachers should know and be able to do for each of the six standards at the preliminary teaching level. Narratives describe the intent of the elements and what new teachers should know and be able to do within a particular domain of practice. TPE elements are shorter, measurable statements that align with the narrative. They describe knowledge, skills, and abilities that new teachers should have the opportunity to learn in teacher preparation programs and be able to demonstrate through successfully completing a teaching performance assessment.

Section 2 describes subject specific pedagogy requirements, developmentally appropriate teaching strategies, and how to support English learners from TK through high school. A specific program standard, **Standard Two: Preparing Candidates to Master the TPEs**, defines that teacher preparation programs must provide new teachers with the opportunity to learn and practice the knowledge, skills, and abilities described in the TPEs and that the TPA must measure the TPEs. The language related to certain subject-specific pedagogical knowledge and skills has been reviewed and updated with the assistance of staff at the California Subject Matter Projects. This language, previously included in both the program standards and the TPEs has been integrated and now provided exclusively within the TPEs.

Section 3 of the TPE document provides a glossary that defines terminology used in the elements, narratives, and subject specific pedagogy descriptions. Additional resources are also indicated. Appendix B contains the revised TPE document.

**Staff Recommendations**

Staff recommends that the Commission (1) review and adopt the draft revised Preliminary Multiple and Single Subject Teacher Preparation Program Standards and transition plan; and (2) approve the draft *Teaching Performance Expectations* for the validity study.

**Next Steps**

A validity study of the revised TPEs is a normative part of assessment development work. Based on the results of the validity study, the TPEs will be revised if needed and brought back to the Commission for adoption in spring 2016. Sponsors of teacher preparation programs will be expected to revise their programs in response to the revised program standards and adopted TPEs, and currently-approved TPA model sponsors will also be expected to revise and update their TPA models so that they are aligned with the Commission’s TPA Assessment Design Standards and focus on assessing the updated TPEs. A process and timeline for program revision and for the review of TPA models will be presented for the Commission’s consideration at a future meeting.
Appendix A
Draft Preliminary Program Standards

Standard 1: Program Design and Curriculum
The program’s design is grounded in a clearly articulated theory of teaching and learning that is research- and evidence-based. The program’s theoretical foundations are reflected in the organization, scope and sequence of the curriculum provided to candidates.

In order to prepare candidates to effectively teach all California public school students, key elements within the program’s curriculum include typical and atypical child and adolescent growth and development; human learning theory; social, cultural, philosophical and historical foundations of education; subject-specific pedagogy; designing and implementing curriculum and assessments; understanding and analyzing student achievement outcomes to improve instruction; understanding of the range of factors affecting student learning such as the effects of poverty, race, and socioeconomic status; and knowledge of the range of positive behavioral supports for students. The program design also includes a coherent candidate assessment system to provide formative information to candidates regarding their progress towards the credential (see Standard 2).

Standard 2: Preparing Candidates to Master the Teaching Performance Expectations (TPEs)
The Teaching Performance Expectations describe the set of professional knowledge, skills and abilities expected of a beginning level practitioner in order to effectively educate and support all students in meeting the state-adopted academic standards.

The program’s organized coursework and clinical practice provide multiple opportunities for candidates to learn, apply, and reflect on each Teaching Performance Expectation (TPE). As candidates progress through the program, pedagogical assignments are increasingly complex and challenging. The scope of the pedagogical assignments (a) addresses the TPEs as they apply to the subjects to be authorized by the credential, and (b) prepares the candidate for the teaching performance assessment (TPA) and other program-based assessments.

As candidates progress through the curriculum, faculty and other qualified supervisors assess candidates’ pedagogical performance in relation to the TPEs and provide formative and timely performance feedback regarding candidates’ progress toward mastering the TPEs.

Standard 3: Clinical Practice
A. Organization of Clinical Practice Experiences
The program’s Clinical Practice experiences are designed to provide the candidate with a developmental and sequential set of activities that are integrated with the program’s coursework and extend the candidate’s learning through application of theory to practice with TK-12 students in California public school classrooms. Clinical Practice is a developmental and sequential set of activities integrated with theoretical and pedagogical coursework, and must consist of a minimum of 600 hours of clinical practice across the arc of the program. The range of Clinical Practice experiences provided by the program includes supervised early field experiences, initial student teaching (co-planning and
co-teaching with both general educators and Education specialists, as appropriate, or guided teaching), and final student teaching. Student teaching includes a minimum of four weeks of solo or co-teaching or its equivalent. For interns, early field experience would take place in an experienced mentor’s classroom.

Dual credential programs leading to both a general and a special education credential are required to have substantive experiences in general education, inclusive, and special education settings within the 600 hours, and are encouraged to extend clinical practice for an additional 150 hours. Candidates who are working in private schools and seeking a credential are required to complete a substantive clinical experience of at least 150 hours in a diverse public school setting.

The program provides initial orientation for preparation program supervisors and district-employed supervisors of clinical practice experiences to ensure all supervisors understand their role and expectations. The minimal amount of program supervision involving formal evaluation of each candidate must be 4 times per quarter or 6 times per semester. The minimum amount of district-employed supervisors’ support and guidance must be 5 hours per week.

Clinical supervision may include an in-person site visit, video capture or synchronous video observation, but it must be archived either by annotated video or scripted observations and evaluated based on the TPEs, that produce data that can be aggregated and disaggregated.

**B. Criteria for School Placements**
Clinical sites (schools) should be selected that demonstrate commitment to collaborative evidence-based practices and continuous program improvement, have partnerships with appropriate other educational, social, and community entities that support teaching and learning, place students with disabilities in the Least Restrictive Environment (LRE), provide robust programs and support for English learners, reflect to the extent possible socioeconomic and cultural diversity, and permit video capture for candidate reflection and TPA completion. Clinical sites should also have a fully qualified site administrator.

**C. Criteria for the Selection of Program Supervisors**
The program selects individuals who are credentialed or who have equivalent experience in educator preparation. Supervisors should be expert in the content area of the candidate being supervised and should have recent professional experiences in public school settings. The program provides supervisors with orientation to the program’s expectations and assures that supervisors are knowledgeable about the program curriculum and assessments, including the TPEs and the TPA model chosen by the program. In addition, program supervisors maintain current knowledge of effective supervision approaches such as cognitive coaching, adult learning theory, and current content-specific pedagogy and instructional practices.

**D. Criteria for the Selection of District-Employed Supervisors** (also may be known as the cooperating teacher, master teacher or on-site mentor)
The program selects district supervisors who hold a Clear Credential in the content area for which they are providing supervision and have a minimum of three years of content area K-12 teaching experience. The district supervisor must have demonstrated exemplary teaching practices as determined by the employer and the preparation program. The matching of candidate and district-employed supervisor must be a collaborative process between the school district and the program.

The program provides district employed supervisors a minimum of 10 hours of initial orientation to the program curriculum, about effective supervision approaches such as cognitive coaching, adult learning theory, and current content-specific pedagogy and instructional practices. The program ensures that district employed supervisors remain current in the knowledge and skills for candidate supervision and program expectations.

**Standard 4: Monitoring, Supporting, and Assessing Candidate Progress towards Meeting Credential Requirements**
Program faculty, program supervisors, and district-employed supervisors monitor and support candidates during their progress towards mastering the TPEs. Evidence regarding candidate progress and performance is used to guide advisement and assistance efforts. The program provides support and assistance to candidates and only retains candidates who are suited for advancement into teaching. Appropriate information is accessible to guide candidates’ satisfaction of all program requirements.

**Standard 5: Implementation of a Teaching Performance Assessment**
*(Note: The contents of draft Standard 5 were adopted by the Commission in April 2015 as TPA Implementation Standards 17-19)*
The TPA is implemented according to the requirements of the Commission-approved model selected by the program. One or more individuals responsible for implementing the TPA document the administration processes for all tasks/activities of the applicable TPA model in accordance with the requirements of the selected model. The program consults as needed with the model sponsor where issues of consistency in implementing the model as designed arise. The program requires program faculty (including full time, adjunct, and other individuals providing instructional and/or supervisory services to candidates within the program) to become knowledgeable about the TPA tasks, rubrics, and scoring, as well as how the TPA is implemented within the program so that they can appropriately prepare candidates for the assessment and also use TPA data for program improvement purposes.

**5A: Administration of the Teaching Performance Assessment (TPA)**
(1) The program identifies one or more individuals responsible for implementing the chosen TPA model and documents the administration processes for all tasks/activities of the applicable TPA model in accordance with the model’s implementation requirements.

(2) For purposes of implementing the video requirement, the program places candidates only in student teaching or intern placements where the candidate is able to record his/her teaching with K-12 students. The program assures that each school or district where the candidate is placed has a recording policy in place. The program requires candidates to affirm that the candidate has
followed all applicable video policies for the TPA task requiring a video, and maintains records of this affirmation for a full accreditation cycle.

(3) If the program participates in the local scoring option provided by the model sponsor, the program coordinates with the model sponsor to identify the local assessors who would be used to score TPA responses from the program’s candidates.

(4) The program maintains program level and candidate level TPA data, including but not limited to individual and aggregated results of candidate performance over time. The program documents the use of these data for Commission reporting, accreditation and program improvement purposes.

(5) The program assures that candidates understand the appropriate use of materials submitted as part of their TPA responses, the appropriate use of their individual performance data, and privacy considerations relating to the use of candidate data.

(6) A program using a local scoring process establishes and consistently uses appropriate measures to ensure the security of all TPA training materials, including all print, online, video, and assessor materials which may be in the program’s possession.

(7) All programs have a clearly defined written appeal policy for candidates and inform candidates about the policy prior to the assessment.

(8) The program using a local scoring process provides and implements an appeal policy, with the model sponsor, for candidates who do not pass the TPA.

5B: Candidate Preparation and Support
The teacher preparation program assures that each candidate receives clear and accurate information about the nature of the pedagogical tasks within the Commission-approved teaching performance assessment model selected by the program and the passing score standard for the assessment. The program provides multiple formative opportunities for candidates to prepare for the TPA tasks/activities. The program assures that candidates understand that all responses to the TPA submitted for scoring represent the candidate’s own work. For candidates who are not successful on the assessment, the program provides appropriate remediation support and guidance on resubmitting task components consistent with model sponsor guidelines.

(1) The program implements as indicated below the following support activities for candidates:
These activities constitute required forms of support for candidates within the TPA process:
- Providing candidates with access to handbooks and other explanatory materials about the TPA and expectations for candidate performance on the assessment.
- Explaining TPA tasks and scoring rubrics.
- Engaging candidates in formative experiences aligned with a TPA (e.g., assignments analyzing their instruction, developing curriculum units, or assessing student work).
- Providing candidates who are not successful on the assessment with additional support focusing on understanding the task(s) and rubric(s) on which the candidate was not successful.
as well as on understanding what needs to be resubmitted for scoring and the process for resubmitting responses for scoring.

These activities constitute **acceptable, but not required** forms of support for candidates within the TPA process:
- Guiding discussions about the TPA tasks and scoring rubrics.
- Providing support documents such as advice on making good choices about what to use within the assessment responses.
- Using TPA scoring rubrics on assignments other than the candidate responses submitted for scoring.
- Asking probing questions about candidate draft TPA responses, without providing direct edits or specific suggestions about the candidate’s work.
- Assisting candidates in understanding how to use the electronic platforms for models/programs using electronic uploading of candidate responses.
- Arranging technical assistance for the video portion of the assessment.

These activities constitute **unacceptable** forms of support for candidates within the TPA process:
- Editing a candidate’s official materials prior to submission and/or prior to resubmission (for candidates who are unsuccessful on the assessment).
- Providing specific critique of candidate responses that indicates alternative responses, prior to submission for official scoring and/or prior to resubmission (for candidates who are unsuccessful on the assessment).
- Telling candidates which video clips to select for submission.
- Uploading candidate TPA responses (written responses or video entries) on public access websites, including social media.

(2) The program provides candidates with timely feedback on formative assessments and experiences preparatory to the TPA. The feedback includes information relative to candidate demonstration of competency on the domains of the Teaching Performance Expectations (TPEs).

(3) The program provides opportunities for candidates who are not successful on the assessment to receive remedial assistance, and to retake the assessment. The program only recommends candidates who have met the passing score on the TPA for a preliminary teaching credential and have met all credential requirements.

**5C: Assessor Qualifications, Training, and Scoring Reliability**
The model sponsor selects potential assessors for the centralized scoring option. The program selects potential assessors for the local scoring option, and must follow selection criteria established by the model sponsor. The selection criteria for all assessors include but are not limited to pedagogical expertise in the content areas assessed within the TPA. The model sponsor is responsible for training, calibration and scoring reliability for all assessors in both local and centralized scoring options. All potential assessors must pass initial training and calibration prior to scoring and must remain calibrated throughout the scoring process.
Standard 6: Clear/Induction Transition Plan
Before exiting the preliminary program, candidates, district-employed supervisors, and program supervisors collaborate on an individual development plan consisting of recommendations for professional development and growth in the candidate’s clear program. The plan is a portable document archived by the preliminary program and provided to the candidate for transmission to the clear/induction program.
Appendix B

Teaching Performance Expectations

The document includes DRAFT Teaching Performance Expectations within the six California Standards for the Teaching Profession (CSTP), a compendium, and a glossary. Each TPE includes a narrative that provides the context and intent of the TPE, and a set of elements that identify key aspects of teacher performance. The compendium provides deeper reference material regarding developmentally appropriate practice, the teaching of English learners, and subject specific pedagogy for multiple and single subject teachers. The glossary defines terms mentioned in the standards, narratives and elements.

The draft TPEs will undergo a systematic validity study and be returned to the Commission in spring 2016 for review and possible adoption.
DRAFT Teaching Performance Expectations (TPEs)
Aligned with the California Standards for the Teaching Profession

TPE 1: Engaging and Supporting All Students in Learning
Elements ........................................................................................................1
Narrative ........................................................................................................2

TPE 2: Creating and Maintaining Effective Environments for Student Learning
Elements ........................................................................................................3
Narrative ........................................................................................................4

TPE 3: Understanding and Organizing Subject Matter for Student Learning
Content Specific Pedagogy*
Elements ........................................................................................................4
Narrative ........................................................................................................5

TPE 4: Planning Instruction and Designing Learning Experiences for All Students
Elements ........................................................................................................6
Narrative ........................................................................................................7

TPE 5: Assessing Student Learning
Elements ........................................................................................................8
Narrative ........................................................................................................8

TPE 6: Developing as a Professional Educator
Elements ........................................................................................................9
Narrative .......................................................................................................10

Subject Matter Pedagogy
Developmentally Appropriate Practices ..........................................................11
Teaching English Learners .............................................................................12
Subject Specific Pedagogical Skills-Multiple Subject Teachers ..................12
Subject Specific Pedagogical Skills-Single Subject Teachers ......................17

Glossary and References ..................................................................................30

This document reflects suggestions that were made during and following the October 2015 Commission meeting through work with the CTC Work Group chairs, CTC staff, and through public input meetings (Oct 28, Nov 16).
DRAFT Teaching Performance Expectations (TPEs)
Aligned with the California Standards for the Teaching Profession

Introduction
Teaching Performance Expectations comprise the body of knowledge, skills, and abilities that beginning general education teachers have the opportunity to learn in approved teacher preparation programs in California. Beginning teachers demonstrate their knowledge of the TPEs by successfully completing coursework, engaging in clinical practice, and by passing a teaching performance assessment (TPA). Beginning teachers meet these requirements prior to being recommended for a preliminary teaching credential in California. TPEs guide teacher preparation program development and are measured through the teaching performance assessment.

TPEs are research based and align to national teaching standard expectations. They link to expectations set forth in California’s student academic content standards. They require beginning teachers to provide safe, healthy, and supportive learning environments, to meet the needs of each and every student, and reflect a focus on modeling digital literacy and building digital citizens. In addition, TPEs explicitly require beginning teachers to know and be able to apply pedagogical theories, principles, and instructional practices for comprehensive instruction of English learners. They know and can apply theories, principles, and instructional practices for English Language Development leading to comprehensive literacy in English. They create inclusive learning environments, on the ground or online, and use their understanding of students’ developmental levels to provide effective instruction and assessment for all.

TPEs are directly and purposely linked to the California Standards for the Teaching Profession (CSTP), standards that also guide California’s teacher Induction programs and ongoing teacher development in California. This direct alignment signals to beginning teachers, preparers of beginning teachers, and to those who support and mentor Induction teachers in their first years of employment, the importance of connecting initial teacher preparation with ongoing support and development of teaching practice in the Induction years and beyond.

The draft TPEs are organized by the six CSTP domains. Detail about expectations for beginning teacher knowledge and performance is provided through TPE narratives and elements for each of the six CTSP Domains:

- Engaging and Supporting All Students in Learning
- Creating and Maintaining Effective Environments for Student Learning
- Planning Instruction and Designing Learning Experiences for All Students
- Assessing Student Learning
- Developing as a Professional Educator

The first section of this document provides the TPE Narratives, and Elements. Section two describes Subject Matter Pedagogy expectations and provides additional descriptions of subject matter based pedagogy and strategies for each type of California credential, multiple subject and single subject. The third and final section is a glossary provided to describe terms and links to reference materials.
All Students
Throughout this set of TPEs, reference is made to “all students” or “all TK-12 students”. This phrase is intended as a widely inclusive term that references all students attending public schools. Students may exhibit a wide range of learning and behavioral characteristics, as well as disabilities, intellectual or academic advancement, and differences based on ethnicity, race, socioeconomic status, gender, language, religion, sexual orientation, and/or geographic origin. The range of students in California public schools also includes students whose first language is English, English learners, and Standard English learners. This inclusive definition of “all students” applies whenever and wherever the phrase “all students” is used in any of the TPEs.

TPE 1: Engaging and Supporting All Students in Learning

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<td>Beginning teachers:</td>
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1. Apply knowledge of students, including their prior experiences, interests, mental health and social-emotional learning needs, as well as their funds of knowledge, cultural, language, and socio-economic backgrounds to engage them in learning.

2. Maintain ongoing communication with students and parents regarding achievement expectations and support needs.

3. Connect subject matter to real-life contexts and provide hands-on experiences to engage student interest, support student motivation, and allow students to extend their learning.

4. Use a variety of developmentally and ability-appropriate instructional strategies, resources, and assistive technology, including principles of Universal Design and a Multi-tiered System of Supports (MTSS), to support access to the curriculum for a wide range of learners within the (general education) classroom—and/or learning environment.

5. Promote students’ critical and creative thinking and analysis through activities that provide opportunities for inquiry, collaborative problem solving, responding to and framing meaningful questions, and reflection.

6. Provide a supportive learning environment for students’ first and/or second language acquisition by using research-based instructional approaches, including focused English Language Development, Specially Designed Academic Instruction in English (SDAIE), scaffolding across content areas, structured English immersion, and determine communicative intent, particularly with students with low verbal abilities.

7. Provide students with opportunities to access the curriculum by incorporating the visual and performing arts, as appropriate to the content and context of learning.

8. Monitor student learning and adjust instruction while teaching so that students continue to be actively engaged in learning.
Narrative

Student Engagement

Beginning teachers use a variety of developmentally appropriate strategies and approaches to create and maintain a supportive learning environment that promotes a positive climate for learning and for the positive social-emotional development of all students. Beginning teachers recognize signs of emotional distress and trauma and understand and value the socio-economic, cultural, and linguistic background, funds of knowledge, and achievement expectations of students, parents, and the community and use these understandings not only within the instructional process but also to establish and maintain positive relationships in and outside the classroom.

Beginning teachers use a variety of instructional principles and approaches such as Universal Design for Learning (UDL) and linguistic scaffolding to ensure the active and equitable participation of all students, and to promote engagement of all students, including students with disabilities, into general education environments using the principles of Multi-tiered System of Supports (MTSS) as appropriate. They ensure that students understand what they are to do during instruction and monitor student progress toward learning goals as identified in the academic content standards and IEPs/IFSPs/ITPs/ 504 Plans, as applicable.

Beginning teachers work with colleagues to support students’ engagement with instruction. Beginning teachers use available community resources, prior student experiences, and applied learning activities, including Arts integration, to make instruction individually and culturally relevant. Beginning teachers provide opportunities and adequate time for students to practice and apply what they have learned within real-world applications and community-based instruction as appropriate and as available. Beginning teachers encourage students to extend their critical and creative thinking by teaching them to respond to and frame meaningful questions.

Language Acquisition and Development

Beginning teachers understand and apply theories, principles, and instructional practices for comprehensive language instruction of English Learners, Standard English learners, students whose first language is English, English learners, and Standard English learners and students with disabilities. They know and understand the appropriate uses of various programs for English language development, including structured English immersion, integrated and designated English language development, and Standard English acquisition. They appropriately apply theories, principles, and instructional practices for English Language Development to support all students’ development of comprehensive literacy in Standard English. Beginning teachers also explain and apply pedagogical theories, principles and practices for the development of academic language, comprehension, and knowledge in the subjects of the core curriculum.

Beginning teachers use a student’s background and assessment of prior learning both in English and their home language to differentiate instruction and to select instructional materials and strategies, including the incorporation of visual and performing arts, to support the student in
comprehension and production of Standard English. They are able to determine communicative intent, particularly with students with low verbal abilities.

Beginning teachers design and implement instruction based on the student’s level of Standard English proficiency and academic achievement keeping in mind that the student’s individual needs vary and may be multifaceted to include struggles with reading and writing, giftedness, first and second language literacy, or other factors as outlined in an IEP/IFSP/or 504 Plan. Additionally, Beginning teachers demonstrate an understanding of the difference between students whose only instructional need is to acquire Standard English proficiency, students who may have an identified disability affecting their ability to acquire Standard English proficiency, and students who may have both a need to acquire Standard English proficiency and an identified disability.

**TPE 2: Creating and Maintaining Effective Environments for Student Learning**

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<tr>
<th>Elements</th>
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<tbody>
<tr>
<td>Beginning teachers:</td>
</tr>
<tr>
<td>1. Promote students’ social-emotional growth, development, and individual responsibility using positive interventions and supports, such as restorative justice and conflict resolution practices, to foster a caring community where each student is treated fairly and respectfully by adults and peers.</td>
</tr>
<tr>
<td>2. Create physical/online learning environments that promote productive student learning, encourage positive interactions among students, reflect diversity and multiple perspectives, and are culturally responsive.</td>
</tr>
<tr>
<td>3. Establish, maintain, and monitor inclusive learning environments that are physically, mentally, intellectually, and emotionally healthy and safe to enable all students to learn.</td>
</tr>
<tr>
<td>4. Know how to support students who have experienced trauma, homelessness, foster care, incarceration, and/or are medically fragile.</td>
</tr>
<tr>
<td>5. Maintain high expectations for learning, with appropriate support for the full range of students in the classroom.</td>
</tr>
<tr>
<td>6. Establish and maintain clear expectations for positive classroom behavior and for student to student and student to teacher interactions by communicating classroom routines, procedures, and norms to students and families.</td>
</tr>
</tbody>
</table>

**Narrative**

Beginning teachers create healthy learning environments by promoting positive relationships and behaviors, welcoming all students, using routines and procedures that maximize student engagement, supporting conflict resolution, and fostering students’ independent and collaborative learning. In addition to individual cultural, linguistic, socioeconomic and academic backgrounds, students come to school with a wide range of life experiences that impact their readiness to learn, including adverse or traumatic childhood experiences, mental health issues,
social-emotional, and physical health needs. The basis of a healthy learning environment is an educator’s in-depth understanding and response (or responsiveness) to each student.

Beginning teachers use a variety of strategies and approaches to create and maintain a supportive learning environment for all students. They use principles of positive behavior intervention and support processes, such as restorative justice and conflict resolution practices, and implement these practices as appropriate to the developmental levels of students to provide a safe and caring classroom climate. Beginning teachers are members of learning communities, they have opportunities to self-reflect, check their implicit and explicit biases, and experience a variety of cultural and linguistic settings. Beginning teachers support students’ mental health, social-emotional, and physical health needs by fostering a safe and welcoming classroom environment where students feel they belong and feel safe to communicate. They encourage students to share and examine a variety of points of view during lessons.

Beginning teachers design and maintain a fair and appropriate system of classroom management that fosters a sense of community and incorporates student voice and family engagement. They regularly assess and adapt this system in response to students, families, and school contexts. Beginning teachers align their classroom management plan with students’ IEP/IFSP/ITP/504 Plans as applicable. Beginning teachers demonstrate an understanding of the role of learners in promoting each other’s learning and the importance of peer relationships in establishing a climate of learning.

TPE 3: Understanding and Organizing Subject Matter for Student Learning

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<tbody>
<tr>
<td>Beginning teachers:</td>
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<tr>
<td>1. Demonstrate knowledge of subject matter, including the adopted California state standards and curriculum frameworks.</td>
</tr>
<tr>
<td>2. Use knowledge about students (e.g. IEP, IFSP, ITP, and 540 plans) and learning goals to organize curriculum to facilitate student understanding of subject matter, and make accommodations and/or modifications as needed to promote student access to the curriculum.</td>
</tr>
<tr>
<td>3. Use instructional strategies appropriate to the subject matter discipline, and design and implement disciplinary and cross-disciplinary learning sequences, including integrating the visual and performing arts as applicable to the discipline.¹</td>
</tr>
<tr>
<td>4. Individually and through consultation and collaboration with other educators and members of the larger school community, plan for effective subject matter instruction and utilizing multiple means of representation, expression, and engagement for providing options for students to demonstrate their knowledge in multiple ways.</td>
</tr>
</tbody>
</table>

¹ See Subject-Specific Pedagogical Skills in the Section 2 for reference.
5. Adapt subject matter curriculum, organization, and planning to support the academic language acquisition and subject matter knowledge of all students, including the full range of English learners, Standard English learners, students with disabilities, and students with other learning needs in the least restrictive environment.

6. During on the ground or online subject matter instruction, use and adapt resources, standards-aligned instructional materials, and a range of technology, including Assistive Technology, to facilitate students’ equitable access to the curriculum.

7. Model and develop digital literacy by using technology to engage students and support their learning, and promote digital citizenship, including respecting copyright law and maintaining internet security, including respecting copyright law, understanding fair-use guidelines, creative commons, and maintaining internet security.

8. Demonstrate knowledge of effective teaching strategies, aligned with the internationally-recognized educational technology and online and blended teaching standards (ISTE, iNACOL).

Narrative

Content Specific Pedagogy and Making Content Accessible

Beginning teachers demonstrate proficiency in planning, delivering, assessing and reflecting on content-specific instruction consistent with the California State Standards for all students in their subject area(s). Beginning teachers are also proficient in explaining and applying pedagogical theories, principles, and practices for the development of literacy and academic language, comprehension, and knowledge in the subjects of the core curriculum for all students. Beginning teachers use their in-depth subject matter knowledge and apply content specific pedagogical skills to design, implement and evaluate learning sequences. Beginning teachers demonstrate proficiency in designing learning sequences that highlight connections, relationships and themes across subjects and disciplines to engage students in real-world applications to make learning relevant and meaningful.

Beginning teachers provide multiple means for students to access content such as linguistic supports, technology, including Assistive Technology, elements of Universal Design for Learning, and accommodations and/or modifications to assessments and instruction. They also address access to content standards as specified in IEPs/IFSPs/ITPs/504 Plans.

Beginning teachers use other resources to make content accessible, such as consulting and collaborating with students, colleagues, and families. They integrate other content areas such as the Arts to maximize access to content.

Integrating Educational Technology

Beginning teachers use appropriate educational technologies to deepen teaching and learning to provide students with opportunities to participate in a digital society and economy. Beginning teachers understand that established learning goals and students’ assessed needs frame the
choices of digital tools and instructional applications consistent with national technology standards including ISTE and INACOL standards. Beginning teachers design, evaluate, and implement technology-rich learning environments to customize and individualize learning opportunities and assessments for students. Beginning teachers integrate knowledge of subject matter, pedagogy, and available instructional technology tools, including Assistive Technology, to design learning experiences that engage and support students in learning the California State Standards, improving conceptual understanding, cultivating critical thinking, and promoting creative learning.

Beginning teachers model knowledge, skills, and fluency in using digital tools. Beginning teachers teach students how to use digital tools to learn, to create new content, and to demonstrate what they are learning. Beginning teachers model and promote digital citizenship and critical digital literacy, such as knowledge and application of copyright law, internet security, and acceptable use policies—including respecting copyright law, understanding fair-use guidelines, creative commons, and maintaining internet security. Beginning teachers promote equal access of all students to digital tools and ensure that students are secure in their digital participation.

TPE 4: Planning Instruction and Designing Learning Experiences for All Students

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<tbody>
<tr>
<td>Beginning teachers:</td>
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<tr>
<td>1. Understand and apply knowledge of the range and characteristics of typical and atypical child development from infancy through adolescence to plan instruction for all students.²</td>
</tr>
<tr>
<td>2. Use assessment data and knowledge of students’ individual learning needs, including academic readiness, language proficiency, cultural background, to establish and communicate learning goals to students and families and create long and short term instructional plans based on those goals.</td>
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<tr>
<td>3. Plan, design, implement and monitor instruction, making effective use of instructional time to maximize learning opportunities and provide access to the curriculum for all students by removing barriers and providing access through instructional strategies that include:</td>
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<tr>
<td>• instructional technology, including Assistive Technology;</td>
</tr>
<tr>
<td>• principles of Universal Design, Multi-tiered System of Supports;</td>
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<tr>
<td>• use of developmentally-appropriate activities and instructional materials;</td>
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<tr>
<td>• knowledge of the range of students’ abilities and disabilities;</td>
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<tr>
<td>• evidence based instruction for students with disabilities in the general education classroom;</td>
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<tr>
<td>• opportunities for students to support each other in learning;</td>
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<tr>
<td>• understanding and appropriate implementation of service delivery models;</td>
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² See Developmentally Appropriate Practices in Section 2 for reference.
- use of culturally-sensitive and appropriate resources; and
- use of community resources and services as applicable.

4. Promote student success by providing opportunities for students to understand and advocate for strategies that meet their individual learning needs and assist students with specific learning needs to successfully participate in transition plans (e.g., IEP/IFSP/ITP/504 plans.)

5. Access resources for planning and instruction, including the expertise of community and school colleagues through in-person or virtual collaboration, co-teaching, coaching, and/or networking.

6. Plan instruction that promotes a range of communication strategies and activity modes between teacher and student, and among students, that encourage student participation in learning.

7. Use subject matter pedagogy and educational technology knowledge, to model how to use digital tools to learn, create new content, and provide personalized and integrated technology-rich lessons so that students can demonstrate their learning.

8. **Know the appropriate time to use technology, and which technology to use.**
   Beginning teachers **know how and when to utilize blended and online learning tools, how and when to use other technologies such as hand-held devices or phones, to present and interact with online technology tools.**

**Narrative**

Beginning teachers demonstrate an understanding of how to effectively combine interrelated knowledge (i.e., content, content pedagogy, and student learning targets) to design appropriate instruction and assessment for all students.

Beginning teachers access and apply knowledge of students' prior achievement and current instructional needs, knowledge of effective instructional techniques for supporting the academic language needs of all students, the specific language needs of English learners, students whose first language is English, English learners, and Standard English learners, the knowledge of effective instructional techniques for students with disabilities in the general education classroom, and knowledge of formative and/or summative student assessment results relative to the K-12 academic content standards.

In planning for instruction consistent with California's K-12 content standards, Beginning teachers access and apply their deep content knowledge of the subject area and use appropriate content-specific pedagogy consistent with research-based practices in the field. Beginning teachers demonstrate an understanding of the principles of Universal Design and Multi-Tiered System of Supports and apply these principles in the content field(s) of their credential to plan instruction that meets individual student needs. Beginning teachers are knowledgeable about typical and atypical child and adolescent abilities, and disabilities, and their effects on student growth and
development, learning, and behavior, and the range of abilities of gifted and talented students. They use this knowledge in planning instruction to meet all students’ needs. Beginning teachers demonstrate alignment between instructional goals/student learning objectives including IEP/IFSP/ITP/504 Plans, instructional procedures, assessment tools/processes, and criteria for evaluation of learning. They provide access to the curriculum for all students by removing barriers and providing access through instructional strategies.

Beginning teachers demonstrate the ability to design and implement instruction and assessment that reflects the interconnectedness of academic content areas and related student skills development in literacy, mathematics, science, and other disciplines across the curriculum in alignment with California’s adopted content standards and their underlying principles.

**TPE 5: Assessing Student Learning**

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<tr>
<td><strong>Beginning teachers:</strong></td>
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<tr>
<td>1. <strong>Apply</strong> knowledge of the purposes, characteristics, and appropriate uses of different types of assessments (diagnostic, informal, formal, progress monitoring, formative, and summative and performance) to design and administer classroom assessments, including use of scoring rubrics.</td>
</tr>
<tr>
<td>2. <strong>Collect</strong> and analyze assessment data from multiple measures and sources to plan and modify instruction and document students’ learning over time.</td>
</tr>
<tr>
<td>3. <strong>Involve</strong> all students in self-assessment and reflection on their learning goals and progress and provide students with opportunities to revise or reframe their work based on assessment feedback.</td>
</tr>
<tr>
<td>4. <strong>Use</strong> technology, as appropriate, to support assessment administration, conduct data analysis, and communicate learning outcomes to students and families.</td>
</tr>
<tr>
<td>5. <strong>Use</strong> assessment information in a timely manner to assist students and families in understanding student progress in meeting learning goals.</td>
</tr>
<tr>
<td>6. <strong>Work</strong> with specialists to interpret assessment results from formative and summative assessments to distinguish between students English learning needs whose first language is English, English learners, and Standard English learners and students with language or other disabilities.</td>
</tr>
<tr>
<td>7. <strong>Interpret</strong> English learners assessment data to identify their level of academic proficiency in English as well as in their primary language, and use this information in planning instruction.</td>
</tr>
<tr>
<td>8. <strong>Use</strong> assessment data to establish learning goals and to plan, differentiate, make accommodations and/or modify instruction including participating in the IEP process.</td>
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**Narrative**

Beginning teachers develop, implement, and use a range of effective classroom assessments to inform and improve instructional design and practice. As Beginning teachers learn about their students, they apply this information to make accommodations and/or modifications of
assessment for English-language students, including English learners, and Standard English learners, students with identified learning needs, students with disabilities, and advanced learners. Beginning teachers use multiple measures and modalities to make an informed judgment about what a student knows and is able to do.

Beginning teachers demonstrate knowledge of student assessment design principles such as test construction, test question development, and scoring approaches, including rubric design. They understand that assessments should be both valid and reliable, and know how to mitigate potential bias in question development and in scoring. Beginning teachers demonstrate knowledge of and administer a variety of assessments, including diagnostic, formative, and summative including performance assessments. They support students in learning how to peer- and self-assess work using identified scoring criteria and/or rubrics. Beginning teachers demonstrate knowledge of a variety of types of assessments and their appropriate uses, including diagnostic, large-scale, norm-referenced, criterion-referenced, and teacher-developed formative and summative assessments. They provide evidence that they understand that assessments are designed and used for a range of purposes.

Beginning teachers analyze data to inform instructional design, self-reflect, reteach, provide resources, and accurately document student academic and developmental progress. They implement fair grading practices and share assessment feedback about performance in a timely and clear way with students, families and other educators. Beginning teachers provide students with opportunities to revise or reframe their work based on assessment feedback, thus leading to new learning.

**TPE 6: Developing as a Professional Educator**

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<tbody>
<tr>
<td><strong>Beginning teachers:</strong></td>
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<tr>
<td>1. Reflect on their own teaching practice and level of subject matter and pedagogical knowledge to initiate learning that can improve instruction and learning for students.</td>
</tr>
<tr>
<td>2. Establish professional learning goals and make progress to improve their practice by routinely engaging in communication and inquiry with colleagues.</td>
</tr>
<tr>
<td>3. Understand how the context, structure, and history of public education in California affects and influences state, district, and school governance as well as state and local education finance.</td>
</tr>
<tr>
<td>4. Understand how to involve and communicate effectively and appropriately with other adults, including peers and colleagues, parents/guardians, and members of the larger school community to support teacher and student learning.</td>
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</tbody>
</table>
5. Demonstrate professional responsibility for all aspects of student learning and classroom management, including the privacy, health, and safety of students and families; conduct themselves with integrity; and model ethical conduct. **Exhibit and continuously develop positive dispositions of caring, support, acceptance, and fairness, toward all students and families, and their colleagues.**

6. Understand and enact professional roles and responsibilities as mandated reporters.

7. Recognize their own values and **bias implicit and explicit biases**, the ways in which these values and **bias implicit and explicit biases** may positively and negatively affect teaching and learning, and work to mitigate any negative impact on the teaching and learning of students, including acts of intolerance and harassment such as bullying or racism.

8. **Know** and uphold all laws relating to the **educational rights of all**, professional misconduct, and moral fitness. They are model digital citizens and understand the positive and negative impact, and exemplify the use of social media, digital platforms and tools, including appropriate and inappropriate use of digital content and social media.

**Narrative**

Throughout their preparation program, Beginning teachers develop an understanding of their fundamental professional responsibilities as educators and as members of a well-established profession, and of their accountability to students, families, colleagues, and schools. Beginning teachers take responsibility for all students’ academic learning outcomes. Beginning teachers exhibit and continuously develop positive dispositions of caring, support, acceptance, fairness, and high expectations toward all students and **families, and their colleagues and families**. They also have positive dispositions toward ongoing learning and development, both personal and professional.

Beginning teachers articulate and analyze their frames of reference, the potential **bias implicit and explicit biases** in these frames, and their impact on expectations for and relationships with students and their families, **and colleagues**.

In becoming professional educators, Beginning teachers become members of complex organizations. Therefore, Beginning teachers describe and have emergent experiences with the structures and contexts of public education, including state, district, and school governance, curriculum and standards development, testing and assessment systems, and basic school finance.

As members of professional school communities, they have opportunities to develop their knowledge, skills, and leadership abilities. Beginning teachers seek opportunities to reflect on and improve their practice through collaborative inquiry, observation feedback, and their own performance data. Beginning teachers participate as team members with colleagues, families,
and agency representatives. They understand their responsibility for ongoing professional learning and for maintaining their certification as members of a profession.

Beginning teachers articulate and practice the profession’s code of ethics and professional standards of practice, and they uphold relevant law and policies, including but not limited to, laws relating to professional misconduct and moral fitness; use of digital content and social media; acts of intolerance and harassment such as bullying and/or racism; laws pertaining to the education and rights of all learners including students whose first language is English, English learners, and Standard English learners and students with disabilities; regulations about mandated reporting; and laws that protect the privacy, health, and safety of students, families, and school professionals.

**Part 2: Subject Matter Pedagogy**

**Introduction**
This section provides additional required expectations for beginning teachers focused on subject specific pedagogies and strategies. Subject matter pedagogy and strategies are dependent on students’ levels of developmental ability and their English language facility. Approved preliminary preparation programs provide opportunities for beginning teachers to learn and practice subject specific pedagogies and strategies. Beginning teachers demonstrate their knowledge of these pedagogies and strategies for student support by passing a subject specific Teaching Performance Assessment, successfully completing course work that includes both instructional and subject specific pedagogy, and engaging in a range of clinical practice experiences.

**Developmentally Appropriate Practices in relation to Subject Specific Pedagogy**
Beginning teachers understand that humans develop along loosely predictable pathways, and they also understand that development within each pathway varies across and within age ranges, depends upon social, cultural, and other contexts, and that pathways and domains influence each other in complex ways. Beginning teachers understand that students’ learning and development are a result of the interaction between students’ prior experiences, their genetic make-up, their maturational status, and the whole range of environmental and cultural experiences that they encounter.

Beginning teachers approach classroom practice with the understanding that all students can learn, and that the social and academic ecology of their classroom has tremendous impact on their learning. Developmental cognitive neuroscience research posits that the brain is constantly reshaping itself in interaction with environmental experience. This suggests that a “learning disability” is more constructively understood as a disconnect between a student’s cognitive profile and the socially determined demands of schooling, rather than as an individual “disability” of dysfunction of a particular brain function.

In order to ensure student learning and well-being in their classrooms, Beginning teachers consider the following as they design and implement subject specific pedagogy and strategies:
1) Students’ growth and development occur within and across multiple, interrelated domains including the physical, cognitive, linguistic, social, psychological, and ethical domains.
2) Development resides in the interaction between context(s) and the individual.
3) Development displays patterns and trajectories as well as variability across time and within and across individuals.

**English Language Development in relation to Subject Specific Pedagogy**
Beginning teachers know and can apply pedagogical theories, principles, and instructional strategies for comprehensive instruction of students whose first language is English, English learners, and Standard English learners. They know and can apply theories, principles, and instructional strategies for English Language Development leading to comprehensive literacy in English. Beginning teachers are familiar with the philosophy, design, goals, and characteristics of programs for English language development, including structured English immersion. They implement an instructional program that facilitates English language development, including reading, writing, listening, and speaking.

**Subject-Specific Pedagogical Skills**
Beginning teachers in all disciplines demonstrate knowledge of and ability to teach content aligned with the California State Standards and the English Language Development Standards. The interdisciplinary nature of these standards requires Beginning teachers to demonstrate both the capacity and a disposition to collaborate with their colleagues to ensure that all students are provided curriculum and instruction that effectively merges literacy within each content area. Moreover, Beginning teachers embrace the concept that English Language and literacy development is a shared responsibility of all content area educators.

**Subject-Specific Pedagogical Skills for Multiple Subject Teaching Assignments**
1. Teaching [English-Language Arts](#) in a Multiple Subject Assignment
2. Teaching [Mathematics](#) in a Multiple Subject Assignment
3. Teaching [History-Social Science](#) in a Multiple Subject Assignment
4. Teaching [Science](#) in a Multiple Subject Assignment
5. Teaching [Physical Education](#) in a Multiple Subject Assignment
6. Teaching [Health Education](#) in a Multiple Subject Assignment
7. Teaching [Visual and Performing Arts](#) in a Multiple Subject Assignment

1. **Teaching English-Language Arts in a Multiple Subject Assignment**

Multiple Subject Credential Beginning teachers demonstrate the ability to design and deliver rich instruction in Reading, Writing, Speaking, Listening, and Language that ensures that all students develop English proficiency and meet or exceed the California Content Standards.

Beginning teachers know the California Standards in English-Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects, and English Language Development, and how these sets of standards complement each other in outlining expected achievements while leaving room for beginning teachers to determine how to promote those achievements.
Beginning teachers understand the key factors that impact ELD/ELA instruction: stages of cognitive development, native language literacy, long-term English learners, and programs and services for English learners. Beginning teachers learn how to provide students with the tools and knowledge that research, professional judgment and experience deem to be most helpful for meeting the Standards. Beginning teachers adopt and use an integrated and interdisciplinary model of literacy, and they observe and participate in the school team that shares responsibility for students’ literacy development.

Preparation programs use the current Frameworks in English/Language Arts and English Language Development as a central resource for Beginning teachers, faculty, and university field supervisors. Beginning teachers study, observe, and practice the five key themes of a robust and comprehensive instructional program: making meaning, language development, effective expression, content knowledge, and foundational skills. Beginning teachers have opportunities to study, observe and practice several approaches to teaching and learning, including inquiry-based learning, collaborative learning, and direct instruction. Beginning teachers study, observe, and practice the principles of Universal Design for Learning, Multi-tiered System of Supports, and a culture of shared responsibility for student learning and development.

Beginning teachers create a print-rich environment where students learn to read and write, comprehend and compose, appreciate and analyze, and perform and enjoy the language arts through a multiplicity of texts. They understand the role of foundational reading skills assessment and instruction in early grades and are equipped to teach these skills effectively. Beginning teachers know how to select and use instructional materials that include a wide range of increasingly complex literary and informational texts appropriate for the grade level. They employ appropriate teaching strategies to develop students’ abilities to read and comprehend narrative and informational texts and to cite specific evidence when offering an oral or written interpretation of a text or making a claim. They select appropriate teaching strategies to develop students’ abilities to write increasingly more sophisticated opinion/persuasive, expository and narrative texts and for students to adapt their communication in relation to audience, task, purpose, and discipline.

Beginning teachers provide opportunities for students to read purposefully and listen attentively to build discipline-specific knowledge in the content areas. They approach literacy through an interdisciplinary lens, finding ways to integrate literacy into a variety of subject areas. Beginning teachers provide opportunities for students to develop oral communication and interpersonal skills. Beginning teachers plan for and encourage students’ use of academic language to extend across reading, writing, speaking, and listening. They make language (vocabulary, conventions, and knowledge of language) comprehensible to students. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.

Beginning teachers know how to determine the skill level of students through the use of meaningful indicators of reading and language arts proficiency prior to instruction, how to determine whether students are making adequate progress on skills and concepts, how to use
this information to inform instruction, and how to determine the effectiveness of instruction and students’ proficiency after instruction.

Preparation programs ensure that Beginning teachers study, observe and practice the five domains of the 2009 RICA Content Specifications in order to demonstrate their pedagogical knowledge and skills in these areas:

- Planning, Organizing, and Managing Reading Instruction Based on Ongoing Assessment;
- Word Analysis
- Fluency
- Vocabulary, Academic Language, and Background Knowledge, and
- Comprehension

Multiple Subject beginning teachers demonstrate the ability to design and deliver instruction that ensures all students meet or exceed the California Standards. They understand how to deliver a comprehensive program of rigorous instruction in Reading, Writing, Speaking and Listening, and Language within standards that establish a progression of increasing complexity. They understand the reciprocal nature of the standards and strategically plan and schedule instruction that ensures that all students meet or exceed the standards.

2. Teaching Mathematics in a Multiple Subject Assignment

Multiple Subject beginning teachers demonstrate the ability to understand and teach the progression of the state-adopted academic content standards for students in mathematics. They demonstrate the ability to teach the state-adopted academic content and English Language Development standards for students in math. They facilitate students’ development of the knowledge and skills required to (a) appropriately use processes of problem solving, reasoning and proof, communication, representation, and connections in real world situations, and (b) appropriately apply the strands of mathematical proficiency, including adaptive reasoning, strategic competence, conceptual understanding, procedural fluency, and productive disposition. Beginning teachers facilitate student understanding of mathematical concepts and support students in making and testing conjectures and recognizing relationships within and among concepts. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.

Beginning teachers provide a secure environment for taking intellectual risks and they model and encourage students to use multiple approaches to mathematical problems. They require student collaboration and written and oral communication that demonstrates students’ ability to construct logical arguments based on substantive claims, sound reasoning, and relevant evidence. They foster positive attitudes toward mathematics, encourage student curiosity, academic discourse, and persistence in solving mathematical problems. Beginning teachers engage students in the Standards for Mathematical Practice: 1) Make sense of problems and persevere in solving them, 2) Reason abstractly and quantitatively, 3) Construct viable arguments and critique the reasoning of others, 4) Model with mathematics, 5) Use appropriate tools strategically, 6) Attend to precision, 7) Look for and make use of structure, and 8) Look for and express regularity in repeated reasoning.
3. **Teaching History-Social Science in a Multiple Subject Assignment**

Multiple Subject beginning teachers demonstrate the ability to teach the state-adopted academic content and English Language Development standards for students in history-social science. They enable students to learn and use basic analytic thinking skills in history and social science while attaining the state-adopted academic content standards for students. Beginning teachers should use history and the related social sciences to develop students’ understanding of the physical world, encourage their participation in the democratic system of government, teach students about our past, inform their financial choices, and improve their ability to make reasoned decisions based upon evidence. Moreover, these disciplines play a vital role in the development of student literacy, because of their shared emphasis on text, argumentation, and use of evidence. Beginning teachers use timelines and maps to give students a sense of temporal and spatial scale. Beginning teachers teach students how social science concepts and themes provide insights into historical periods and cultures. Beginning teachers help students understand events and periods from multiple perspectives by using primary sources, simulations, case studies, cultural artifacts, works of art and literature, cooperative projects, and student research activities. Beginning teachers teach students to independently read and comprehend instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write a variety of texts in which they make claims and form interpretations based on a variety of primary and secondary documents. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.

4. **Teaching Science in a Multiple Subject Assignment**

Multiple Subject beginning teachers demonstrate the ability to teach the state-adopted academic content standards and English Language Development standards for students in science. They balance the focus of instruction between disciplinary core ideas, crosscutting concepts and scientific and engineering practices as indicated in the Next Generation Science Standards. Their explanations, demonstrations, and class activities serve to illustrate science concepts and principles, scientific investigation, and experimentation. Beginning teachers emphasize the nature of science the integration of engineering design, and the connections between science, society, technology and the environment. Further, Beginning teachers integrate mathematical concepts and practices including the importance of accuracy, precision, and estimation of data, and literacy into science pedagogy. Beginning teachers teach students to independently read and comprehend instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to engage in disciplinary discourse practices that foster evidence-based explanations and argumentations to write opinion/persuasive and expository text in the content area. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.

5. **Teaching Physical Education in a Multiple Subject Assignment**

Multiple Subject beginning teachers demonstrate the ability to design and implement instruction that ensures all students meet or exceed state-adopted content standards for physical education, and English Language Development standards. They balance the focus of instruction between
motor skill development, and concepts, principles, strategies of physical education content. Beginning teachers know how to collect evidence of student learning through the use of appropriate assessment tools and how to use the evidence they collect to inform instructional decisions and provide feedback to students.

Their explanations, demonstrations, and class activities serve to help students demonstrate the motor skills and movement patterns needed to perform a variety of physical activities and demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performing of physical activities. Further, Beginning teachers demonstrate ability to support students learning how to assess and maintain a level of physical fitness that improves health and performance, as well as utilizing their knowledge of psychological and sociological concepts that apply to the learning and principles of physical activity.

Beginning teachers provide a safe environment for discussion of sensitive issues, taking intellectual risks, and the risks associated with learning to move in a public environment.

Beginning teachers teach students to independently read and comprehend instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write opinion/persuasive and expository text in the physical education and use speaking and listening. They provide students the opportunity to use and evaluate media and technology as integral tools for learning the content of physical education.

6. Teaching Health Education in a Multiple Subject Assignment
Multiple Subject beginning teachers demonstrate the ability to design and implement instruction that ensures all students meet or exceed state-adopted content standards for health education, and English Language Development standards.

Beginning teachers balance the focus of instruction to support students in comprehending essential concepts of good health; analyzing internal and external influences that affect health; demonstrating the ability to access and analyze health information, products, and services; use interpersonal communication skills to enhance health; use decision making skills and goal setting to enhance health; practice behaviors that reduce risk; and practice behaviors that promote and support personal, family, and community health. They select appropriate teaching strategies to enhance learning and provide appropriate feedback for students and align instruction with assessment.

Beginning teachers teach students to independently read and comprehend instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write opinion/persuasive and expository text in the health education and use speaking and listening. They provide students the opportunity to use and evaluate media and technology as integral tools for learning the content of health education.
7. Teaching Visual and Performing Arts in a Multiple Subject Assignment

Multiple subject beginning teachers are responsible for instruction in the four arts content areas, per Education Code. They demonstrate the ability to teach the state-adopted academic content and English Language Development standards for students in art. The four arts content areas, dance, music, theatre, and visual arts each have California Content Standards and exist as four content areas within the CA Visual and Performing Arts Framework. Students gain from sequential instruction in each art content area, which goes beyond the learning in the specific art discipline and the realization that learning in these content areas builds transferable college and career ready skills. Learning in an art supports students in other academic subjects, fosters engagement in school and motivation to learn, and builds students’ skills in collaboration, communication, and in navigating and understanding the diversity of the world needed for success in college and career.

Beginning teachers:
- understand and teach the foundational academic content of each arts discipline within the standards,
- facilitate the students’ literacy development in the art form and in ELA,
- craft a progression of complexity,
- know the difference of discreet and interdisciplinary approaches and how to craft instruction in each within multiple subject settings,
- assess student learning in each art content areas to promote student learning,
- provide students with opportunity to see value of arts learning and skill development for their future schooling and careers,
- work in environments with single subject arts Beginning teachers (the elementary music or visual arts teacher) and/or community arts resources.

Subject-Specific Pedagogical Skills for Single Subject Teaching Assignments
1. Teaching English Language Arts in a Single Subject Assignment
2. Teaching Mathematics in a Single Subject Assignment
3. Teaching History/Social Science in a Single Subject Assignment
4. Teaching Science in a Single Subject Assignment
5. Teaching Physical Education in a Single Subject Assignment
6. Teaching Art in a Single Subject Assignment
7. Teaching Music in a Single Subject Assignment
8. Teaching World Languages in a Single Subject Assignment
9. Teaching Agriculture in a Single Subject Assignment
10. Teaching Business in a Single Subject Assignment
11. Teaching Health in a Single Subject Assignment
12. Teaching Home Economics in a Single Subject Assignment
13. Teaching Industrial and Technology Education in a Single Subject Assignment
14. Teaching English Language Development in a Single Subject Assignment
1. Teaching English-Language Arts in a Single Subject Assignment

English beginning teachers demonstrate the ability to teach the state-adopted academic content standards for students in English-Language Arts and English Language Development. They understand how to plan and deliver instruction of increasing complexity in reading, writing, speaking and listening, and language to ensure that students meet or exceed the standards. They understand how to make English-Language Arts comprehensible to students and the need for students to use all forms of language as tools for thinking, learning and communicating.

They understand how to teach the skills for reading and comprehending complex literary and informational texts; interpreting meaning; analyzing structure of texts; and evaluating perspective. Beginning teachers teach students how to produce argumentative, informative, and narrative text; implement the writing process; conduct research projects; and write for a range of disciplines, tasks, purposes, and audiences. They select appropriate teaching strategies to develop students’ abilities to read and comprehend narrative and informational texts and to cite specific evidence when offering an oral or written interpretation of a text. They understand how to teach formal and informal speaking and listening skills including collaboration, conversation and presentation of knowledge and ideas. Beginning teachers understand how to teach vocabulary acquisition and use, standard English conventions, and functions of language in various contexts.

Beginning teachers model and assist students to integrate technology and media into language arts when conducting research, producing and publishing writing, creating multimedia presentations, and interacting and collaborating with others in this and other disciplines. They provide students the opportunity to integrate media and technology as integral tools in the classroom.

They know how to determine the skill level of students through the use of meaningful indicators of reading and language arts proficiency prior to instruction, how to determine whether students are making adequate progress in skills and concepts taught, and how to determine the effectiveness of instruction and students’ proficiency after instruction.

2. Teaching Mathematics in a Single Subject Assignment

Beginning teachers in all disciplines demonstrate knowledge of and ability to teach math content aligned with the California State Standards and the English Language Development Standards. The interdisciplinary nature of these standards requires beginning teachers to demonstrate both the capacity and a disposition to collaborate with their colleagues to ensure that all students are provided curriculum and instruction that effectively merges literacy within each content area. Moreover, it means that beginning teachers must embrace the concept that English Language and literacy development is a shared responsibility of all content area educators.

Mathematics beginning teachers demonstrate the ability to teach the state-adopted academic standards for students to meet or exceed the end of the year expectations for their grade or course in order to be college and career ready by the end of grade 12. Beginning teachers enable students to understand basic mathematical computations, concepts, and symbols, to use them
to solve common problems, and to apply them to novel problems. Beginning teachers help students understand different mathematical topics and make connections among them. Beginning teachers help students solve real-world problems using mathematical reasoning and concrete, verbal, symbolic, and graphic representations. They require student collaboration and written and oral communication that demonstrates students’ ability to construct logical arguments based on substantive claims, sound reasoning, and relevant evidence. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.

Beginning teachers provide a secure environment for taking intellectual risks, model and encourage students to use multiple ways of approaching mathematical problems, and encourage discussion of different solution strategies. They demonstrate positive attitudes toward mathematics, and encourage student curiosity, flexibility, and persistence in solving mathematical problems.

Additionally, beginning teachers use developmentally appropriate and diverse strategies to engage students in grades 7-12 to understand mathematics as a logical system that includes definitions, axioms, and theorems, and to understand and use mathematical notation and advanced symbols. They assign and assess work through progress-monitoring and summative assessments that include illustrations of student thinking such as open-ended questions, investigations, and projects.

Beginning teachers engage students in the Standards for Mathematical Practice: 1) Make sense of problems and persevere in solving them, 2) Reason abstractly and quantitatively, 3) Construct viable arguments and critique the reasoning of others, 4) Model with mathematics, 5) Use appropriate tools strategically, 6) Attend to precision, 7) Look for and make use of structure, and 8) Look for and express regularity in repeated reasoning.

3. Teaching History-Social Science in a Single Subject Assignment
History-Social Science beginning teachers demonstrate the ability to design and implement instruction that ensures all students meet or exceed state-adopted standards in history-social science, and English Language Development standards. They enable students to learn and use analytic thinking skills in history and social science while attaining the state-adopted standards for students. Beginning teachers should use history and the related social sciences to develop students’ understanding of the physical world, encourage their participation in the democratic system of government, teach students about our past, inform their financial choices, and improve their ability to make reasoned decisions based upon evidence. These disciplines play a vital role in the development of student literacy, because of their shared emphasis on text, argumentation, and use of evidence. Beginning teachers should help students engage with questions and topics of disciplinary significance rather than learn to memorize discrete pieces of information that do not appear to connect to broader issues. Beginning teachers should also be able to use timelines and maps to reinforce students’ sense of temporal and spatial scale. They teach students how social science concepts and themes provide insights into historical periods and cultures. They help students understand events and periods from multiple perspectives by using primary
sources, simulations, case studies, cultural artifacts, works of art and literature, cooperative projects, and student research activities. Beginning teachers teach students to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository text in the content area.

Additionally, History-Social Science Single Subject beginning teachers connect understandings of people, events, and debates to broad themes, concepts and principles; and they relate history-social science content to broader contextual understandings so that students better understand their current world. They teach students how cultural perspectives inform and influence understandings of history. They select and use age-appropriate primary and secondary documents and artifacts to help students understand a historical period, event, region or culture. Beginning teachers ask questions and structure academic instruction to help students recognize implicit and explicit bias and subjectivity in historical actors. They create classroom environments that support the discussion of sensitive issues (e.g., social, cultural, religious, race, and gender issues), and encourage students to reflect on and share their insights and values. They design activities to illustrate multiple viewpoints on issues. They provide students with the opportunity to use media and technology as tools to enhance their understanding of the content area. Beginning teachers monitor the progress of students as they work to understand, debate, and critically analyze social science issues, data, and research conclusions from multiple perspectives.

4. Teaching Science in a Single Subject Assignment
Science beginning teachers demonstrate the ability to teach the state-adopted academic content standards for students in science, and English Language Development standards. They balance the focus of instruction between disciplinary core ideas, crosscutting concepts and scientific and engineering practices as indicated in the Next Generation Science Standards. Their explanations, demonstrations, and class activities serve to illustrate science concepts, and principles, scientific investigation, and experimentation. Beginning teachers emphasize the nature of science the integration of engineering design, and the connections between science, society, technology and the environment. Further, Beginning teachers integrate mathematical concepts and practices including the importance of accuracy, precision, and estimation of data, and literacy into science pedagogy. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom. Beginning teachers encourage students to pursue science and engineering interests, especially students from groups underrepresented in science and engineering careers. When live animals are present in the classroom, Beginning teachers teach students to provide ethical care. They demonstrate sensitivity to students’ cultural and ethnic backgrounds in designing science instruction. Beginning teachers also teach students to engage in disciplinary discourse practices that foster evidence-based explanations and arguments to write opinion/persuasive and expository text in the content area.
Beginning teachers teach students to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository text in the content area.

Additionally, Beginning teachers guide, monitor and encourage students during investigations and experiments. They demonstrate and encourage use of multiple ways to measure and record scientific data, including the use of mathematical symbols. They structure and sequence science instruction to enhance students’ academic knowledge to meet or exceed the state-adopted academic content standards for students. They establish and monitor procedures for the care, safe use, and storage of equipment and materials, and for the disposal of potentially hazardous materials.

5. Teaching Physical Education in a Single Subject Assignment
Physical education beginning teachers demonstrate the ability to design and implement instruction that ensures all students meet or exceed state-adopted standards for physical education, and English Language Development Standards.

They balance the focus of instruction between motor skills development, knowledge of concepts related to learning movement skills, assessing physical fitness, knowledge of concepts related to physical fitness, and the psychological and sociological concepts related to physical activity. Beginning teachers build content rich instructional sequences that connect to prior learning and establish pathways to future learning in physical education and other academic disciplines.

Beginning teachers know how to collect evidence of student learning through the use of appropriate assessment tools and how to use the evidence they collect to inform instructional decisions and provide feedback to students.

Beginning teachers provide a safe environment for discussion of sensitive issues, taking intellectual risks, and the risks associated with learning to move in a public environment. Further, Beginning teachers know how to establish the learning environment that includes a variety of strategies and structures for best meeting students’ needs in learning the content of physical education.

Beginning teachers support students learning to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts and graphic/media representations that contribute to learning the content of physical education. Beginning teachers also teach students to write argumentative and expository text in the physical education, and they understand how to teach speaking and listening skills including collaboration, conversation and presentation of knowledge and ideas that contribute to the learning of the content of physical education. They provide students with the opportunity to use media and technology as tools to enhance their understanding of the content area.
Beginning teachers design instruction that supports the development of dispositions toward a healthy lifestyle, to think critically and analytically, and to reflect on and solve problems to minimize barriers to physical activity participation throughout life. In addition, Beginning teachers create class environments that support students’ cultural and ethnic backgrounds, ensure safe and productive participation in physical activity by developing procedures for care and use of equipment, carefully organizing and monitoring activities, and designing instruction to best meet students’ needs in learning the content.

6. Teaching Art in a Single Subject Assignment
Single Subject Art beginning teachers demonstrate the ability to teach the state-adopted academic content and literacy for Technical Subject standards for students in Visual Arts, and English Language Development standards. They are able to strategically plan, implement, and evaluate instruction that assures that students meet or exceed the visual arts content and literacy for Technical Subject standards. They are able to design instruction that engages students through inquiry in researching for information and resources needed to explore an artistic question, supports students’ development in creative processes, artistic skills and techniques, and supports students’ literacy in expression and communication of ideas in both written and visual forms.

Single Subject Visual Arts beginning teachers model and encourage student creativity, flexibility, collaboration, and persistence in solving artistic problems of given to them and of their own making. They provide secure and safe environments that allow students to take risks and approach artistic, design or aesthetic problems in multiple ways. Their explanations, demonstrations, and planned activities serve to involve students in learning experiences that help students process and respond to sensory information through the languages and skills unique to the visual arts. Visual Arts Single Subject Beginning teachers build students’ creative problem solving process and skills, innovative and critical thinking, communication, collaborative and technical skills through engagement of translating thoughts, perceptions, and ideas into original works of art or design using a variety of media and techniques. They establish, teach and monitor procedures for the evaluation of, safe care, use, and storage of art equipment and materials used during the creative process.

Beginning teachers understand and are able to teach students about the historical, cultural and contemporary contributions and dimensions of art, providing insights into the role and development of the visual arts in past and present contexts throughout the world. They emphasize the contributions of art to historical and contemporary culture, society, and the economy, especially in California. Teacher Beginning teachers guide students as they make informed critical judgments, evaluations and responses about the quality, impact and success of artworks through perceiving, analyzing, and applying differing sets of criteria. Beginning teachers also provide their students with the skills and knowledge to develop their own relevant criteria to evaluation a work of art, design or collection of works.

Beginning teachers teach students to independently read both literal text and visual texts, comprehend, and evaluate instructional materials that include increasingly complex subject-
relevant texts, visual and written, and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write evaluative, argumentative and expository visual arts texts and create visual images, structures, or curate a collection of objects/images to express views, statements, or facts.

They provide students the opportunity to use and evaluate strengths and limitations of media and technology as an integral creative, expressive and communication tool. They are able to raise students’ awareness of ethical responsibilities and safety issues when sharing images and other materials through the Internet and other communication formats. They demonstrate and teach an awareness of practices, issues and ethics of appropriation, fair use, copyright, open source, and creative commons as they apply to creating works of arts and design.

Beginning teachers understand how to design and implement instruction for their students to uncover the connections of visual arts content and skills to college and career opportunities, life skills and lifelong learning.

7. Teaching Music in a Single Subject Assignment
Single Subject Music beginning teachers demonstrate the ability to teach the state-adopted academic content and literacy for Technical Subject standards for students in Music and English Language Development standards. They model highly developed aural musicianship and aural analysis skills, teach music theory and analysis (including transcription of musical excerpts; error detection; analysis of form, style, and compositional devices; harmonic progressions and cadences), and can teach students to read and notate music, compose, improvise, understand the techniques of orchestration and have facility in transposition.

Beginning teachers model expressive and skillful performance on a primary instrument or voice and are proficient in keyboard skills. They use effective conducting techniques and teach students to sight sing, sight read, improvise, compose and arrange music. Beginning teachers use wide knowledge of Western and non-Western works in their instruction. They help students understand the roles of musicians, composers, technology, and general instruments in diverse cultures, contexts, contemporary and historical periods, and identify contributions of diverse cultural, ethnic and gender groups and well-known musicians in the development of musical genres.

Beginning teachers instruct students in voice, keyboard, woodwinds, brass, strings, guitar and percussion. They use a variety of instrumental, choral and ensemble rehearsal techniques and employ an understanding of developmental stages of learning in relation to music instruction.

Beginning teachers enable students to understand aesthetic valuing in music and teach them to respond to, analyze and critique performances and works of music, including their own. Beginning teachers teach students to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts, domain specific text, and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository texts in music through literal text and
create musical compositions or select a collection of music to express views, positions, or facts.

They teach the connections and relationships between music and the other arts as well as between music and other academic disciplines. They inform students of career and lifelong learning opportunities available in the field of music, media and entertainment industries.

Beginning teachers use various learning approaches and can instruct students in using movement to demonstrate rhythm and expressive nuances of music. They instruct using a broad range of repertoire and literature and evaluate those materials for specific educational purposes. They use various strategies for sequencing, planning and assessing music learning in general music and ensemble classes including portfolio, video recording, audio recording, adjudication forms and rubrics. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as an integral creative, expressive and communication tool. They are able to raise students’ awareness of ethical responsibilities and safety issues when sharing musical compositions and other materials through the Internet and other communication formats. They demonstrate and teach an awareness of practices, issues and ethics of appropriation, fair use, copyright, open source, and creative commons as they apply to composing music.

8. Teaching World Language in a Single Subject Assignment
World Language beginning teachers demonstrate the ability to design and implement instruction that ensures all students meet or exceed state adopted standards in World Languages, and English Language Development standards. First, and most important, they demonstrate a high proficiency in the language and culture that allows them to conduct their classes in the target language and to the extent possible in authentic cultural settings. In addition, beginning teachers demonstrate the ability to teach in a proficiency-oriented program with a commitment to teaching and learning using the three communicative modes (Interpretive Interpersonal and presentational and the enabling skills (Listening, Reading, Speaking and Writing) that support them, thus enabling Beginning teachers to support their students to demonstrate communicative ability in the target language and culture from level 1 to advanced. Beginning teachers teach students to independently read, comprehend, and select instructional materials, including authentic resources that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository text in the target language.

Beginning teachers demonstrate knowledge of the nature of language, basic linguistics and a thorough understanding of the structural conventions and practical use of the target language. Beginning teachers also demonstrate an in-depth knowledge and understanding of the cultures and societies in which the target language is spoken, with validation and expansion of the language and cultures of heritage and native speakers. They demonstrate that they have the requisite knowledge necessary to plan and deliver challenging lessons, to assess their students using a variety of formative and summative assessment tools by using current methodology in second-language acquisition, with attention to critical thinking and emphasis on evidence of student learning to inform their best practices in teaching. Beginning teachers also demonstrate that they have the knowledge of using technology to support and enhance their instruction. They
provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools for learning or demonstrating their linguistic and cultural competency.

9. Teaching Agriculture in a Single Subject Assignment
Single Subject Agriculture beginning teachers demonstrate the ability to teach the state-adopted academic content standard for students in Agriculture, and English Language Development standards. They understand how to deliver a four year comprehensive program of systematic instruction and application of basic and advanced subject matter in animal science, plant and soil science, ornamental horticulture, agriculture business management, environmental science and natural resource management, and agricultural systems management. Explanations, demonstrations, class and laboratory activities serve to illustrate agricultural concepts and principles, scientific investigation and experimentation, and the application of new learning. Beginning teachers encourage students to pursue agricultural interests, especially students from groups underrepresented in agricultural careers.

Beginning teachers teach students to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository text in the content area.

Agricultural beginning teachers structure and sequence agricultural instruction to support and enhance students’ academic knowledge to meet or exceed the state-adopted academic content standards. Additionally, Single Subject beginning teachers guide, monitor and encourage students during hands-on laboratory investigations, experiments and practicum. They establish and monitor procedures for the care, safe use, and storage of equipment and materials, and for the disposal of potentially hazardous materials. Beginning teachers teach students to provide ethical care and handling of live animals. They demonstrate sensitivity to students’ cultural and ethical backgrounds in designing agriculture instruction.

They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.

10. Teaching Business in a Single Subject Assignment
Single Subject business beginning teachers demonstrate the ability to teach the state-adopted career technical education (CCTE) model curriculum standards in business for student mastery, and English Language Development standards. They prepare students to carry out business management functions with an understanding of organizational theory and development, leadership, and motivational concepts. Beginning teachers enable students to solve real-world business problems that include methods of decision making applied to legal and ethical principles, the application of mathematical operations leading to quantitative and qualitative analysis, and the understanding and application of accounting concepts, principles, procedures, and financial analysis. They prepare students to apply key marketing principles and concepts including but not limited to, customer service, selling, promotion, and distribution in both
domestic and international markets. Beginning teachers teach students to apply principles and procedures related to applications, networking systems, and basic concepts of programming and systems development and then ethical use of information technology in business situations.

Beginning teachers instruct students in the basic economic principles as they apply to microeconomic and macroeconomic theories and principles in domestic and international economies. Beginning teachers assist students in a variety of procedures to address individual career development and provide ample opportunities for students to develop their own employment and entrepreneurial skills. Beginning teachers assist students to apply the knowledge of technology, reading, writing, mathematics, speaking, and active listening skills in a variety of business situations. Beginning teachers teach students to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository text in the content area. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom. Beginning teachers utilize a variety of authentic, performance-based assessment strategies to assess students’ skills and abilities.

11. Teaching Health Science in a Single Subject Assignment
Health Science beginning teachers demonstrate the ability to design and implement instruction that ensures all students meet or exceed state-adopted standards for health education, and English Language Development standards.

Single Subject Health Science beginning teachers demonstrate the ability to teach the state-adopted academic content standards for students in Health Science. Beginning teachers demonstrate a fundamental understanding of professional, legal, scientific, behavioral and philosophical principles of health education and the role of the school health educator within a Coordinated School Health Program (CSHP). They demonstrate problem-solving and critical-thinking skills that develop confidence in the decision making process and promote healthy behaviors. Beginning teachers recognize differences in individual growth and development and variation in culture and family life. They assess individual and community needs for health education by interpreting health related data about social and cultural environments. They differentiate between health education practices that are grounded in scientific research and those that are not research-based. They identify opportunities for collaboration among health educators in all settings, including school and community health professions.

Beginning teachers use their analytical skills to identify behaviors that enhance and/or compromise personal health and well-being. They recognize the short-term and long-term effects of the lifestyle choices and habits of individuals and integrate higher-level thinking skills within the context of various health topics. They apply a variety of risk assessment skills and prevention strategies to health-related issues. Beginning teachers demonstrate effective communication and advocacy skills as they relate to personal, family, and community health and health education needs in order to effectively motivate California's diverse youth to adopt a healthy lifestyle. They understand the role of communication and communication skills in
interpersonal relationships and identify strategies that encourage appropriate expression. Beginning teachers teach students to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository text in the content area, and they understand how to teach speaking and listening skills including collaboration, conversation and presentation of knowledge and ideas that contribute to the learning of the content of health education. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.

12. Teaching Home Economics in a Single Subject Assignment
Single Subject Home Economics beginning teachers demonstrate the ability to teach the state-adopted career and technology standards for students in home economics, and English Language Development standards. They understand how to create home economics career pathways by planning sequences of courses for two complementary, fiscally responsible, inclusive instructional programs, Consumer and Family Studies (CSF) and Home Economics Related Occupations (HERO). They know how to employ FHA-HERO as a teaching strategy for developing interpersonal, leadership, citizenship, and career skills. They teach students the essential knowledge and skills for managing their personal, family, and work responsibilities through engaging learning activities, appropriately selected for the eight content areas of CFS. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.

In the HERO program, beginning teachers work closely with industry partners and plan authentic learning experiences to prepare students for entry-level careers or advanced training and education. They plan and supervise student work including group assignments, laboratory work, and on-the-job-training. They help students understand underlying theories and complex concepts (e.g., developmental theories in child development and organic chemistry in food science) and solve real-life problems using appropriate problem-solving, creative thinking and critical thinking skills. Beginning teachers teach students to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository text in the content area. They plan assessments of student learning, provide frequent feedback, assist students in the achievement of the standards, and use evidence of student learning to improve their program.

13. Teaching Industrial and Technology Education in a Single Subject Assignment
Single Subject Industrial and Technology (ITE) beginning teachers demonstrate the ability to teach the state-adopted content standards for students in Technology Education, traditional Industrial Arts, all forms of Computer Education, and English Language Development standards. They provide students with an understanding of the nature of technology and of its core technological concepts. They provide students the opportunity to use and evaluate strengths and limitations of media and technology as integral tools in the classroom.
They prepare students to understand and use the design process as a problem-solving model. They design and provide to students, problems, exercises, and projects that require the application of core academic knowledge, including (but not limited to) the fields of science, mathematics, economics, social science, and data analysis. Beginning teachers teach students to independently read, comprehend, and evaluate instructional materials that include increasingly complex subject-relevant texts and graphic/media representations presented in diverse formats. Beginning teachers also teach students to write argumentative and expository text in the content area.

Beginning teachers teach students how to work and behave in a safe manner, and they model safety in the laboratory. They prepare students to use all types of tools safely, correctly, and effectively. Additionally, Industrial and Technology Education Single Subject Beginning teachers prepare students to understand the connections and interactions between technology and all aspects of society. The students will gain a heightened awareness of cultural, social, economic, and environmental concerns related to and impacted by technology. Beginning teachers will provide connections between industry and students to facilitate real-world understandings of industry, provide external experiences, establish internships, and reinforce for students the critical role of lifelong learning as well as provide a foundation for making ITE-related career choices.

14. Teaching English Language Development in a Single Subject Setting
During interrelated activities in program coursework and fieldwork, beginning teachers learn specific teaching strategies that are effective in supporting them to deliver a comprehensive program of systematic instruction in English Language Development and English Language Arts aligned with both sets of state-adopted standards. They understand the background, history, and legal requirements for English learner education in California and the United States. They learn and practice ways to design and deliver direct, explicit and systematic ELD instruction that addresses English learners’ oral language, aural language, reading, and writing development needs across the curriculum. Beginning teachers demonstrate fundamental understanding of first, second, and multiple language development, applied linguistics, and cultural foundations. They are well versed in culturally relevant pedagogy and strategies for effectively communicating with families from a variety of cultures and backgrounds. They demonstrate effective communication and advocacy skills as these relate to English learner student, family, and community needs. Beginning teachers are knowledgeable in composition and rhetoric and can apply principles of literature and textual analysis to both literary and informational texts.

Beginning teachers of English Language Development understand, plan, design, implement and assess instructional outcomes for all students including the full range of English learners. They learn and practice ways to:

- Design and implement differentiated instruction based on the levels of English proficiency, needs and strengths of the range of English learners as well as struggling readers and writers, advanced learners, students who use non-dominant varieties of English, students with exceptional needs, and students from a variety of educational and linguistic backgrounds.
• Address the unique needs of long-term English learners that distinguish them from newcomers and other types of English learners.
• Teach students about the norms and values of US cultures, the culture of schooling and how to access school and community resources.
• Assess student progress, both formally and informally, and use the results to inform and plan instruction that advances the learning of all English Learner students.
• Connect and contextualize reading, writing, aural, and oral language development instruction.
• Implement effective English language development strategies to engage students and promote numerous opportunities for developing oral language across the curriculum.
• Improve students’ reading comprehension, including students’ ability to access grade-level texts of increasing depth and complexity and activate background knowledge, make connections, synthesize information, and evaluate texts.
• Improve students’ ability to critique texts and media for point of view, bias implicit and explicit bias, power, validity, truthfulness, persuasive techniques, and appeal to both friendly and critical audiences.
• Provide writing instruction (inclusive of the writing process) on conventions, domains (i.e. response to literature, informational, persuasive, and technical), research, and applications that address all levels of proficiency from formulation of sentences to multi-paragraph essays.
• Incorporate technology into language arts as a tool for conducting research.
• Provide academic language development instruction emphasizing discourse that leads to the production of complex texts.
• Provide systematic vocabulary development that emphasizes high utility words used across curricular areas.
<table>
<thead>
<tr>
<th>CSTP Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>504 Plan</td>
<td>The &quot;504&quot; in &quot;504 plan&quot; refers to Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, which specifies that no one with a disability can be excluded from participating in federally funded programs or activities, including elementary, secondary or postsecondary schooling. &quot;Disability&quot; in this context refers to a &quot;physical or mental impairment which substantially limits one or more major life activities.&quot; This can include physical impairments; illnesses or injuries; communicable diseases; chronic conditions like asthma, allergies and diabetes; and learning problems.</td>
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<tr>
<td>Academic language</td>
<td>Academic language refers to the oral, written, auditory, and visual language proficiency required to learn effectively in schools and academic programs—i.e., it’s the language used in classroom lessons, books, tests, and assignments, and it’s the language that students are expected to learn and achieve fluency in. Frequently contrasted with “conversational” or “social” language, academic language includes a variety of formal-language skills—such as vocabulary, grammar, punctuation, syntax, discipline-specific terminology, or rhetorical conventions—that allow students to acquire knowledge and academic skills while also successfully navigating school policies, assignments, expectations, and cultural norms.</td>
</tr>
<tr>
<td>Accommodations</td>
<td>Accommodations can help students learn the same material and meet the same expectations as their classmates. If a student has reading issues, for example, she might listen to an audio recording of a text.</td>
</tr>
<tr>
<td>Adverse childhood experience</td>
<td>Adverse childhood experiences (ACEs) are potentially traumatic events that can have negative, lasting effects on health and well-being. These experiences range from physical, emotional, or sexual abuse to parental divorce or the incarceration of a parent or guardian.</td>
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<tr>
<td>All P-12 students</td>
<td>Students attending P-12 schools including, but not limited to, students with disabilities or exceptionalities, students who are gifted, and students who represent diversity based on ethnicity, race, socioeconomic status, gender, language, religion, sexual identification, and/or geographic origin. All students includes English only students, English learners, and Standard English learners</td>
</tr>
<tr>
<td>Assessment</td>
<td>In education, the term assessment refers to the wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness, learning progress, skill acquisition, or educational needs of students.</td>
</tr>
<tr>
<td>Assistive technology</td>
<td>Assistive technology is an umbrella term that includes assistive, adaptive, and rehabilitative devices for people with disabilities and also includes the process used in selecting, locating, and using them. Assistive technology promotes greater independence by enabling people to perform tasks that they were formerly unable to accomplish, or had great difficulty accomplishing, by providing enhancements to, or changing methods of interacting with, the technology needed to accomplish such tasks.</td>
</tr>
<tr>
<td>Authentic Assessment</td>
<td>A form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills (Mueller, Jon)</td>
</tr>
<tr>
<td>Blended Learning</td>
<td>A formal education program in which a student learns: (1) at least in part through online learning, with some element of student control over time, place, path, and/or pace; (2) at least in part in a supervised brick-and-mortar location away from home; (3) and the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience.</td>
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<tr>
<td>California State Standards for all students</td>
<td>Content standards were designed to encourage the highest achievement of every student, by defining the knowledge, concepts, and skills that students should acquire at each grade level and are adopted by the State Board of Education.</td>
</tr>
<tr>
<td>CEC/CEEDAR</td>
<td>CEEDAR stands for “Collaboration for Effective Educator Development, Accountability and Reform.” We help states and institutes of higher education reform their teacher and leader preparation programs, revise licensure standards to align with reforms, refine personnel evaluation systems, and realign policy structures and professional learning systems. See: <a href="http://ceedar.education.ufl.edu/">http://ceedar.education.ufl.edu/</a></td>
</tr>
<tr>
<td>Certification</td>
<td><a href="http://www.ctc.ca.gov/credentials/req-teaching.html#general">http://www.ctc.ca.gov/credentials/req-teaching.html#general</a></td>
</tr>
<tr>
<td>Collaborative inquiry</td>
<td>Collaborative inquiry is a process in which participants come together to examine their own educational practice systematically and carefully using techniques of research. It may include as few as two educators or a group of several educators interested in addressing a school, department, division, or classroom issue driven by the consideration of student learning needs. Teams work together to narrow the question, gather and analyze evidence, determine action steps, and share their findings and recommendations.</td>
</tr>
<tr>
<td>Copyright law</td>
<td>A copyright is a form of protection provided by the laws of the United States to authors of &quot;original works of authorship.&quot; This includes literary, dramatic, musical, artistic and certain other creative works. Material not protected by copyright (or otherwise protected) is available for use by anyone without the author’s consent. A copyright holder can prevent others from copying, performing or otherwise using the work without his or her consent.</td>
</tr>
<tr>
<td>Core curriculum</td>
<td>The definition of core curriculum is a set of courses that are considered basic and essential for future class work and graduation. Math, science, English, history and geography are an example of core curriculum in a middle school or high school. For California’s core curriculum go to: <a href="http://www.cde.ca.gov/search/searchresults.asp?cx=00177922524537247843:gpfw5rhiw&amp;output=xml_no_dtd&amp;filter=1&amp;num=20&amp;start=0&amp;q=Core%20curriculum">http://www.cde.ca.gov/search/searchresults.asp?cx=00177922524537247843:gpfw5rhiw&amp;output=xml_no_dtd&amp;filter=1&amp;num=20&amp;start=0&amp;q=Core%20curriculum</a></td>
</tr>
<tr>
<td>Co-teaching</td>
<td>The general definition of co-teaching involves two equally-qualified individuals who may or may not have the same area of expertise jointly delivering instruction to a group of students</td>
</tr>
<tr>
<td>Creative Commons</td>
<td><strong>Creative Commons (CC)</strong> is a non-profit organization devoted to expanding the range of creative works available for others to build upon legally and to share. The organization has released several copyright-licenses known as Creative Commons licenses free of charge to the public. These licenses allow creators to communicate which rights they reserve, and which rights they waive for the benefit of recipients or other creators. An easy-to-understand one-page explanation of rights, with associated visual symbols, explains the specifics of each Creative Commons license. Creative Commons licenses do not replace copyright, but are based upon it. They replace individual negotiations for</td>
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<td>specific rights between copyright owner (licensor) and licensee, which are necessary under an &quot;all rights reserved&quot; copyright management, with a &quot;some rights reserved&quot; management employing standardized licenses for re-use cases where no commercial compensation is sought by the copyright owner. The result is an agile, low-overhead and low-cost copyright-management regime, profiting both copyright owners and licensees</td>
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</tr>
<tr>
<td>Creative thinking</td>
<td>A way of looking at problems or situations from a fresh perspective that suggests unorthodox solutions (which may look unsettling at first). Creative thinking can be stimulated both by an unstructured process such as brainstorming, and by a structured process such as lateral thinking.</td>
</tr>
<tr>
<td>Criterion-referenced assessment</td>
<td>Testing or assessment in which performance is judged in relation to pre-established standards and not in relation to the performance of other students.</td>
</tr>
<tr>
<td>Critical thinking</td>
<td><strong>Critical thinking</strong> is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action</td>
</tr>
<tr>
<td>Diagnostic assessment</td>
<td>Diagnostic assessments (also known as pre-assessments) provide instructors with information about student’s prior knowledge and misconceptions before beginning a learning activity. They also provide a baseline for understanding how much learning has taken place after the learning activity is completed. Instructors usually build concepts sequentially throughout a course.</td>
</tr>
<tr>
<td>Digital literacy</td>
<td>Digital Literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.</td>
</tr>
<tr>
<td>Digital society</td>
<td>A Digital Society is a modern, progressive society that is formed as a result of the adoption and integration of Information and Communication Technologies at home, work, education and recreation.</td>
</tr>
<tr>
<td>Disability</td>
<td>A student with a disability means a student evaluated in accordance with Sec. Sec. 300.304 through 300.311 as having mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as “emotional disturbance”), an orthopedic impairment, autism, traumatic brain injury, an other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.</td>
</tr>
<tr>
<td>Discipline</td>
<td>A branch of knowledge.</td>
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<tr>
<td>English language development (ELD)</td>
<td>Instructional support needed by ELs in developing proficiency in English language and literacy as they engage in learning academic subject matter. <a href="mailto:eldstandards@cde.ca.gov">eldstandards@cde.ca.gov</a></td>
</tr>
<tr>
<td>English learner</td>
<td><strong>English learners</strong>, or ELs, are students who are unable to communicate fluently or learn effectively in English, who often come from non-English-speaking homes and backgrounds, and who typically require specialized or modified instruction in both the English language and in their academic courses.</td>
</tr>
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</table>
| Equity                            | In education, the term equity refers to the principle of fairness. While it is often used interchangeably with the related principle of equality, equity encompasses a wide variety
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<tr>
<td>Formative assessment</td>
<td>The goal of formative assessment is to gather feedback that can be used by the instructor and the students to guide improvements in the ongoing teaching and learning context. These are low stakes assessments for students and instructors.</td>
</tr>
<tr>
<td>Funds of Knowledge</td>
<td><em>Funds of knowledge</em> is defined by researchers Luis Moll, Cathy Amanti, Deborah Neff, and Norma Gonzalez (2001) “to refer to the historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being” (p. 133). When teachers shed their role of teacher and expert and, instead, take on a new role as learner, they can come to know their students and the families of their students in new and distinct ways.</td>
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<tr>
<td>Home language</td>
<td>The language(s) spoken in the home of each student.</td>
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<tr>
<td>IEP</td>
<td>An Individualized Education Program (IEP) defines the individualized objectives of a child who has been found with a disability, as defined by federal regulations. The IEP is intended to help children reach educational goals more easily than they otherwise would. In all cases the IEP must be tailored to the individual student's needs as identified by the IEP evaluation process, and must especially help Beginning teachers and related service providers (such as paraprofessional educators) understand the student's disability and how the disability affects the learning process.</td>
</tr>
<tr>
<td>IFSP</td>
<td>An Individual Family Service Plan (IFSP) is a plan for special services for young children with developmental delays. An IFSP only applies to children from birth to three years of age. Once a child turns 3 years old, an Individualized Education Program (IEP) is put into place.</td>
</tr>
<tr>
<td>iNACOL</td>
<td><a href="http://www.inacol.org/">http://www.inacol.org/</a> International Association for K-12 Online Learning</td>
</tr>
<tr>
<td>Internet security</td>
<td><em>Internet security</em> is a catch-all term for a very broad issue covering security for transactions made over the Internet. Generally, <em>Internet security</em> encompasses browser security, the security of data entered through a Web form, and overall authentication and protection of data sent via Internet Protocol.</td>
</tr>
<tr>
<td>Implicit and explicit bias</td>
<td>Explicit bias are the result of intentional, conscious, and controllable thoughts and beliefs. Explicit biases usually are directed toward a group of people based on what is being perceived. An example of an explicit stereotype would be that all adolescent girls like to play with dolls and makeup. Implicit bias are associations learned through past experiences. Implicit biases can be activated by the environment, and operate outside of intentional conscious cognition. This bias may be associated with one event seen in the past, but the source of these associations may be misidentified, or even unknown by the individual who holds them, and can persist even when an individual rejects the stereotype explicitly.</td>
</tr>
<tr>
<td>ISTE</td>
<td>International Society for Technology in Education. ISTE is a not-for-profit organization dedicated to supporting the use of information technology to aid in learning, teaching of TK-12 students and teachers. “The ISTE Standards for Students” now includes creativity and innovation, communication and collaboration, research and information fluency,</td>
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<td>critical thinking, problem solving, decision making, and digital citizenship along with technology operations and concepts. See <a href="http://www.iste.org">www.iste.org</a></td>
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<tr>
<td>ITP</td>
<td>A transition plan is the section of the Individual Education Plan (IEP) that outlines transition goals and services for the student. The Individual Transition Plan (ITP) is the template for mapping out long-term adult outcomes from which annual goals and objectives are defined.</td>
</tr>
<tr>
<td>Data collection efforts in which large numbers of students are assessed. Results are usually used to compare groups of students in districts, states, and nationally. Assessment results are used to describe the educational status of students, make decisions about individual students, and develop or revise existing local, state, and national policies. These assessments can include the &quot;minimum competency tests&quot; and &quot;graduation exams&quot; that students must pass to receive a high school diploma.</td>
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<tr>
<td>Learning sequence</td>
<td>A series of connected lessons</td>
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<tr>
<td>Linguistic supports</td>
<td>Culturally responsive teachers create a classroom environment that makes students feel comfortable, regardless of their language differences. Students with diverse language needs can adequately meet academic goals when teachers use appropriate strategies and check for student understanding. Teachers use supports such as manipulatives, word walls, real objects, pictures, or graphics, cooperative learning, building on background knowledge, reading aloud interactively, using labels, and technology.</td>
</tr>
<tr>
<td>Mandated reporting</td>
<td>In California, certain individuals are mandated by law to report known or suspected child abuse. These mandated reporters are listed in the Child Abuse and Neglect Reporting Act (CANRA); of the over 40 categories listed, teachers are listed first. The Child Abuse and Neglect Reporting Act (CANRA) was passed in 1980. It can be found in the California Penal Code (P.C.), sections 11164-11174.3. CANRA provides definitions, procedures for reporting suspected abuse, and protections as well as liabilities for mandated reporters. Sections of the Education Code (E.C.) also provide procedures for educators reporting suspected abuse.</td>
</tr>
<tr>
<td>Misconduct and moral fitness</td>
<td>Generally, the Education Code beginning with Section 44000 governs the Commission on Teacher Credentialing and teacher discipline, and misconduct is governed by the Education Code, beginning with Section 44240. The Education Code is available at <a href="http://www.leginfo.ca.gov/calaw.html">http://www.leginfo.ca.gov/calaw.html</a> and the 2007 Laws and Rules Manual Pertaining to the Discipline of Professional Certificated Personnel is available by clicking here [PDF]. Also see <a href="http://www.ctc.ca.gov">www.ctc.ca.gov</a> and go to Educator Misconduct.</td>
</tr>
<tr>
<td>Modalities</td>
<td>Modalities refer to how students use their senses in the learning process. We commonly consider four modalities: visual (seeing), auditory (hearing), kinesthetic (moving), and tactile (touching).</td>
</tr>
<tr>
<td>Modifications</td>
<td>Modifications to instruction are made for students for academic, behavioral, and/or social needs. Students with learning needs may require changes, or modifications, to the curriculum. For example, a student could be assigned shorter or easier reading assignments. Students who receive modifications are not expected to learn the same material in the same way as their classmates, however, they should be given equitable opportunities to learn the material.</td>
</tr>
<tr>
<td>Multiple measures</td>
<td>Teachers provide students with multiple opportunities to demonstrate their knowledge, skill or ability. Several assessment results and/or examples of student work or evidence</td>
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<tr>
<td>Multi-tiered System of Supports (MTSS)</td>
<td>In California, MTSS is an integrated, comprehensive framework that focuses on CCSS, core instruction, differentiated learning, student-centered learning, individualized student needs, and the alignment of systems necessary for all students’ academic, behavioral, and social success. California has a long history of providing numerous systems of support. These include the interventions within the RTI² processes, supports for Special Education, Title I, Title III, support services for English Learners, American-Indian students, and those in gifted and talented programs. MTSS offers the potential to create needed systematic change through intentional design and redesign of services and supports that quickly identify and match the needs of all students. <a href="http://www.cde.ca.gov/ci/cr/ri/mtsscomprti2.asp">http://www.cde.ca.gov/ci/cr/ri/mtsscomprti2.asp</a></td>
</tr>
<tr>
<td>Non-standard English</td>
<td><strong>Non-standard English</strong>, also written as <strong>nonstandard English</strong>, refers to use of <strong>English</strong>, especially regarding <strong>grammar</strong>, but also including other aspects of <strong>language</strong>, that is considered by convention to be sub-standard or not &quot;proper&quot;.</td>
</tr>
<tr>
<td>Norm-referenced assessment</td>
<td>A norm-referenced test (NRT) is a type of <strong>test, assessment</strong>, or <strong>evaluation</strong> which yields an estimate of the position of the tested individual in a predefined population, with respect to the trait being measured. The estimate is derived from the analysis of test scores and possibly other relevant data from a <strong>sample</strong> drawn from the population. That is, this type of test identifies whether the test taker performed better or worse than other test takers, not whether the test taker knows either more or less material than is necessary for a given purpose.</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>The principles, practice, or profession of teaching</td>
</tr>
<tr>
<td>Peer assessment</td>
<td>Peer assessment is a process through which students and instructors share in the evaluation of student work. It can have many different forms. Researchers find that peer assessment deepens students’ understanding of their own learning and empowers students to become more actively engaged and self-directed in their learning processes (Falchikov, 2005; Sivan, 2000).</td>
</tr>
<tr>
<td>Personal Learning Network (PLN)</td>
<td>A <strong>personal learning network</strong> is an informal <strong>learning network</strong> that consists of the people a learner interacts with and derives knowledge from in a <strong>personal learning</strong> environment.</td>
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<td>Positive behavior intervention</td>
<td>PBIS is a framework or approach for assisting school personnel in adopting and organizing evidence-based behavioral interventions into an integrated continuum that enhances academic and social behavior outcomes for all students. PBIS is a prevention-oriented way for school personnel to (a) organize evidence-based practices, (b) improve their implementation of those practices, and (c) maximize academic and social behavior outcomes for students. PBIS supports the success of ALL students.</td>
</tr>
<tr>
<td>Professional learning</td>
<td>Professional learning is something most teachers and educators do everyday, as they reflect on our professional practice, work together and share ideas, and strive to improve student outcomes.</td>
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<tr>
<td>Progress monitoring assessment</td>
<td>Progress monitoring is used to assess students’ academic performance, to quantify a student rate of improvement or responsiveness to instruction, and to evaluate the effectiveness of instruction. Progress monitoring can be implemented with individual students or an entire class.</td>
</tr>
<tr>
<td>Real-world application</td>
<td>When learning connects what students are taught in school to real-world issues, problems, and applications. The basic idea is that students are more likely to be interested in what they are learning, more motivated to learn new concepts and skills, and better prepared to succeed in college, careers, and adulthood if what they are learning mirrors real-life contexts, equips them with practical and useful skills, and addresses topics that are relevant and applicable to their lives outside of school.</td>
</tr>
<tr>
<td>Reframe</td>
<td>To frame or express (words or a concept or plan) differently to assist a student to understand an idea or concept.</td>
</tr>
<tr>
<td>Reliability</td>
<td>The degree to which assessment scores for a group of assessment takers are consistent over repeated applications of a measurement procedure and hence are inferred to be dependable and repeatable for an individual assessment taker. A measure is said to have a high reliability if it produces consistent results under consistent conditions.</td>
</tr>
<tr>
<td>Restorative practices</td>
<td>Restorative practices is a social science that integrates developments from a variety of disciplines and fields — including education, psychology, social work, criminology, sociology, organizational development and leadership — in order to build healthy communities, increase social capital, decrease crime and antisocial behavior, repair harm and restore relationships.</td>
</tr>
<tr>
<td>Rubric</td>
<td>A tool for scoring student work or performances, typically in the form of a table or matrix, with criteria that describe the dimensions of the outcomes down the left-hand vertical axis, and levels of performance across the horizontal axis. The work of performance may be given an overall score (holistic scoring) or criteria may be scored individually (analytic scoring). Rubrics are also used for communicating expectations.</td>
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<tr>
<td>SAMR</td>
<td>Utilize the higher levels of the SAMR model designed to help educators infuse technology into teaching and learning. Popularized by Dr. Ruben Puentedura, the model supports and enables teachers to design, develop, and infuse digital learning experiences that utilize technology. &lt;br&gt;source: Kathy Schrock's Guide <a href="http://www.schrockguide.net/samr.html">http://www.schrockguide.net/samr.html</a></td>
</tr>
<tr>
<td>Scaffolding</td>
<td>In education, scaffolding refers to a variety of instructional techniques used to move students progressively toward stronger understanding and, ultimately, greater independence in the learning process. The term itself offers the relevant descriptive metaphor: teachers provide successive levels of temporary support that help students</td>
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<td>reach higher levels of comprehension and skill acquisition that they would not be able to achieve without assistance. Like physical scaffolding, the supportive strategies are incrementally removed when they are no longer needed, and the teacher gradually shifts more responsibility over the learning process to the student.</td>
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<tr>
<td>School-wide systems of support include proactive strategies for defining, teaching, and supporting appropriate student behaviors to create positive school environments. Instead of using a piecemeal approach of individual behavioral management plans, a continuum of positive behavior support for all students within a school is implemented in areas including the classroom and non-classroom settings (such as hallways, buses, and restrooms). Positive behavior support is an application of a behaviorally-based systems approach to enhance the capacity of schools, families, and communities to design effective environments that improve the link between research-validated practices and the environments in which teaching and learning occurs. Attention is focused on creating and sustaining primary (school-wide), secondary (classroom), and tertiary (individual) systems of support that improve lifestyle results (personal, health, social, family, work, recreation) for all children and youth by making targeted behaviors less effective, efficient, and relevant, and desired behavior more functional.</td>
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<tr>
<td>Self-assessment</td>
<td>Self-assessment is the process of looking at oneself in order to assess aspects that are important to one’s identity. It is one of the motives that drive self-evaluation, along with self-verification and self-enhancement.</td>
</tr>
<tr>
<td>Social media</td>
<td><strong>Social media</strong> are computer-mediated tools that allow people to create, share or exchange information, career interests, ideas, and pictures/videos in virtual communities and networks. Social media is defined as &quot;a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content.&quot; Furthermore, social media depends on mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, co-create, discuss, and modify user-generated content.</td>
</tr>
<tr>
<td>Standard English learner</td>
<td>Standard English learners (SELS) are ethnic native speakers of English whose mastery of the Standard English language used in the curriculum and discourse of schools is limited due to their use of ethnic specific nonstandard dialects (LeMoine, 1999).</td>
</tr>
<tr>
<td>Structured English Immersion</td>
<td>Structured English Immersion (SEI) is a technique for rapidly teaching English to English Language Learners. The term was coined by Keith Baker and Adriana de Kanter in a 1983 recommendation to schools to make use of Canada's successful French immersion programs.</td>
</tr>
<tr>
<td>Student voice</td>
<td><strong>Student voice</strong> is the individual and collective perspective and actions of students within the context of learning and education.</td>
</tr>
<tr>
<td>Subject matter knowledge</td>
<td>The topic dealt with or the subject represented in a debate, exposition, or work of art</td>
</tr>
<tr>
<td>Summative assessment</td>
<td>The goal of summative assessment is to measure the level of success or proficiency that has been obtained at the end of an instructional unit, by comparing it against some standard or benchmark.</td>
</tr>
<tr>
<td>System of classroom management</td>
<td>Classroom management is the process by which teachers and schools create and maintain appropriate behavior of students in classroom settings. The purpose of implementing classroom management strategies is to enhance prosocial behavior and</td>
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<td>increase student academic engagement (Emmer &amp; Sabornie, 2015; Everston &amp; Weinstein, 2006). <strong>Classroom management</strong> refers to the wide variety of skills and techniques that teachers use to keep students organized, orderly, focused, attentive, on task, and academically productive during a class. When classroom-management strategies are executed effectively, teachers minimize the behaviors that impede learning for both individual students and groups of students, while maximizing the behaviors that facilitate or enhance learning.</td>
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<tr>
<td>Technology tools</td>
<td><strong>Technology</strong> (&quot;science of craft&quot;, from Greek τέχνη, techne, &quot;art, skill, cunning of hand&quot;; and -λογία, -logia[^3]) is the collection of techniques, <strong>skills</strong>, methods and processes used in the production of <strong>goods</strong> or <strong>services</strong> or in the accomplishment of objectives, such as scientific investigation. Technology can be the <strong>knowledge</strong> of techniques, processes, etc. or it can be embedded in machines, computers, devices and factories, which can be operated by individuals without detailed knowledge of the workings of such things.</td>
</tr>
<tr>
<td>Technology-rich</td>
<td>Leveraging the opportunities technology creates to prepare learners for a globally connected, information-saturated world. Digital tools to customize learning and enable self-directed learning.</td>
</tr>
<tr>
<td>Test implicit and explicit bias</td>
<td>Educational tests are considered implicit and explicit biased if a test design, or the way results are interpreted and used, systematically disadvantages certain groups of students over others, such as students of color, students from lower-income backgrounds, students who are not proficient in the English language, or students who are not fluent in certain cultural customs and traditions.</td>
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<tr>
<td>Universal Design for Learning (UDL)</td>
<td>Universal Design for Learning is a set of principles for <strong>curriculum</strong> development that give all individuals equal opportunities to learn. UDL provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone—not a single, one-size-fits-all solution but rather flexible approaches that can be customized and adjusted for individual needs.</td>
</tr>
<tr>
<td>Validity</td>
<td>The extent to which a set of operations, test, or other assessment measures what it is supposed to measure. Validity is not a property of a data set but refers to the appropriateness of inferences from tests scores or other forms of assessment and the credibility of the interpretations that are made concerning the findings of a measurement effort.</td>
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Additional Resources

Website Links
California Commission on Teacher Credentialing: www.ca.ctc.gov
California Department of Education: www.ca.cde.gov
California Subject Matter Projects:

California's Multi-Tiered System of Supports

Comparing MTSS to RtI²
CDE’s RtI² processes focus on students who are struggling and provide a vehicle for teamwork and data-based decision making to strengthen their performances before and after educational and behavioral problems increase in intensity. Please visit the CDE Web site on RtI² for further information.

MTSS Differences with RtI²
MTSS has a broader scope than does RtI². MTSS also includes:

- Focusing on aligning the entire system of initiatives, supports, and resources.
- Promoting district participation in identifying and supporting systems for alignment of resources, as well as site and grade level.
- Systematically addressing support for all students, including gifted and high achievers.
- Enabling a paradigm shift for providing support and setting higher expectations for all students through intentional design and redesign of integrated services and supports, rather than selection of a few components of RtI and intensive interventions.
- Endorsing Universal Design for Learning instructional strategies so all students have opportunities for learning through differentiated content, processes, and product.
- Integrating instructional and intervention support so that systemic changes are sustainable and based on CCSS-aligned classroom instruction.
- Challenging all school staff to change the way in which they have traditionally worked across all school settings.

MTSS is not designed for consideration in special education placement decisions, such as specific learning disabilities. MTSS focuses on all students in education contexts.

MTSS Similarities to RtI²
MTSS incorporates many of the same components of RtI², such as

- Supporting high-quality standards and research-based, culturally and linguistically relevant instruction with the belief that every student can learn including students of
poverty, students with disabilities, English learners, and students from all ethnicities evident in the school and district cultures.

Integrating a data collection and assessment system, including universal screening, diagnostics and progress monitoring, to inform decisions appropriate for each tier of service delivery.

Relying on a problem-solving systems process and method to identify problems, develop interventions and, evaluate the effectiveness of the intervention in a multi-tiered system of service delivery.

Seeking and implementing appropriate research-based interventions for improving student learning.

Using school-wide and classroom research-based positive behavioral supports for achieving important social and learning outcomes.

Implementing a collaborative approach to analyze student data and working together in the intervention process.

**Universal Design for Learning**

http://www.udlcenter.org/aboutudl/udlguidelines

The term UNIVERSAL DESIGN FOR LEARNING means a scientifically valid framework for guiding educational practice that:

(A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and (B) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient.

In addition to this definition, the framework of UDL has been elaborated by CAST in Teaching Every Student in the Digital Age by Rose & Meyer (ASCD, 2002), The Universally Designed Classroom (Rose, Meyer, & Hitchcock, Eds.; Harvard Education Press, 2005), and A Practical Reader in Universal Design for Learning (Rose & Meyer, Eds.; Harvard Education Press, 2006).

**Purpose of UDL Curriculum**

The purpose of UDL curricula is not simply to help students master a specific body of knowledge or a specific set of skills, but to help them master learning itself—in short, to become expert learners. Expert learners have developed three broad characteristics. They are: a) strategic, skillful and goal directed; b) knowledgeable, and c) purposeful and motivated to learn more.

**Components of UDL Curriculum**

Four highly interrelated components comprise a UDL curriculum: goals, methods, materials, and assessments. Here we explain differences between traditional and UDL definitions of each component.
Goals are often described as learning expectations. They represent the knowledge, concepts, and skills all students should master, and are generally aligned to standards. Within the UDL framework, goals themselves are articulated in a way that acknowledges learner variability and differentiates goals from means. These qualities enable teachers of UDL curricula to offer more options and alternatives—varied pathways, tools, strategies, and scaffolds for reaching mastery. Whereas traditional curricula focus on content or performance goals, a UDL curriculum focuses on developing “expert learners.” This sets higher expectations, reachable by every learner.

Methods are generally defined as the instructional decisions, approaches, procedures, or routines that expert teachers use to accelerate or enhance learning. Expert teachers apply evidence-based methods and differentiate those methods according to the goal of instruction. UDL curricula facilitate further differentiation of methods, based on learner variability in the context of the task, learner’s social/emotional resources, and the classroom climate. Flexible and varied, UDL methods are adjusted based on continual monitoring of learner progress.

Materials are usually seen as the media used to present learning content and what the learner uses to demonstrate knowledge. Within the UDL framework, the hallmark of materials is their variability and flexibility. For conveying conceptual knowledge, UDL materials offer multiple media and embedded, just-in-time supports such as hyperlinked glossaries, background information, and on-screen coaching. For strategic learning and expression of knowledge, UDL materials offer tools and supports needed to access, analyze, organize, synthesize, and demonstrate understanding in varied ways. For engaging with learning, UDL materials offer alternative pathways to success including choice of content where appropriate, varied levels of support and challenge, and options for recruiting and sustaining interest and motivation.

Assessment is described as the process of gathering information about a learner’s performance using a variety of methods and materials in order to determine learners’ knowledge, skills, and motivation for the purpose of making informed educational decisions. Within the UDL framework, the goal is to improve the accuracy and timeliness of assessments, and to ensure that they are comprehensive and articulate enough to guide instruction – for all learners. This is achieved in part by keen focus on the goal, as distinct from the means, enabling the provision of supports and scaffolds for construct irrelevant items. By broadening means to accommodate learner variability, UDL assessments reduce or remove barriers to accurate measurement of learner knowledge, skills, and engagement.

Principle I: Provide Multiple Means of Representation (the “what” of learning)

I. Provide Multiple Means of Representation

<table>
<thead>
<tr>
<th>Perception, Language, Expressions, and Symbols Comprehension</th>
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Learners differ in the ways that they perceive and comprehend information that is presented to them. For example, those with sensory disabilities (e.g., blindness or deafness); learning disabilities (e.g., dyslexia); language or cultural differences, and so forth may all require different ways of approaching content. Others may simply grasp information quicker or more efficiently through visual or auditory means rather than printed text. Also learning, and transfer of learning, occurs when multiple representations are used, because it allows students to make connections
within, as well as between, concepts. In short, there is not one means of representation that will be optimal for all learners; providing options for representation is essential.

**Principle II: Provide Multiple Means of Action and Expression (the “how” of learning)**

<table>
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<tr>
<th>II. Provide Multiple Means of Action and Expression</th>
<th><strong>Physical Action, Expression and Communication Executive function</strong></th>
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Learners differ in the ways that they can navigate a learning environment and express what they know. For example, individuals with significant movement impairments (e.g., cerebral palsy), those who struggle with strategic and organizational abilities (executive function disorders), those who have language barriers, and so forth approach learning tasks very differently. Some may be able to express themselves well in written text but not speech, and vice versa. It should also be recognized that action and expression require a great deal of strategy, practice, and organization, and this is another area in which learners can differ. In reality, there is not one means of action and expression that will be optimal for all learners; providing options for action and expression is essential.

**Principle III: Provide Multiple Means of Engagement (the “why” of learning)**

| III. Provide Multiple Means of Engagement | Recruiting interest, Sustaining effort and persistence, Self-regulation |

Affect represents a crucial element to learning, and learners differ markedly in the ways in which they can be engaged or motivated to learn. There are a variety of sources that can influence individual variation in affect including neurology, culture, personal relevance, subjectivity, and background knowledge, along with a variety of other factors presented in these guidelines. Some learners are highly engaged by spontaneity and novelty while other are disengaged, even frightened, by those aspects, preferring strict routine. Some learners might like to work alone, while others prefer to work with their peers. In reality, there is not one means of engagement that will be optimal for all learners in all contexts; providing multiple options for engagement is essential.

The pedagogical, neuroscientific, and practical underpinnings of UDL are also discussed at greater length in books such as Teaching Every Student in the Digital Age by Rose & Meyer (ASCD, 2002), The Universally Designed Classroom (Rose, Meyer, & Hitchcock, Eds.; Harvard Education Press, 2005), and A Practical Reader in Universal Design for Learning (Rose & Meyer, Eds.; Harvard Education Press, 2006).