Instructional Strategies Manual Multiple Subject Credential Program California State University, Long Beach

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Section I:

Instructional Strategies for Consideration and Reflection

Active Participation

Active participation is defined as the consistent, ongoing, simultaneous involvement of the minds of all learners with the content. It can be a mental activity (covert) and/or an observable, measureable activity (overt) typically categorized as an oral activity, written, or using gestures. Typically, active participation is best utilized when both covert and overt strategies are combined. Illustration 1.1 shows actions related to covert and overt active participation strategies.

Active Participation

<u>Convert</u>

- Imagine
- Remember
- Pretend
- Recall
- Listen
- Look
- Think About
- Visualize
- Picture
- Watch
- Solve/mentally
- Read/silently
- Memorize

<u>Overt</u>

Oral

- Say
- Share
- Explain
- Tell
- Discuss
- Respond
- Reply
- Echo

- Comment
- Rehearse
- Cooperate

Written

- Write
- Draw
- Illustrate
- Record
- Track
- Copy
- Describe on paper
- •

Gesture

- Show
- Signal
- Point
- Mark/Touch
- Nod
- Dramatize
- Pantomime

During the course of an instructional sequence or lesson, active participation strategies can be utilized several different times for multiple reasons. The purpose of using active participation strategies is either to engage students or to collect formative student data to monitor progress. Often utilizing an active participation strategy will be beneficial under both objectives; to engage the students and collect data to monitor progress of instruction. For example, asking all students to individually write a response on a white board has two purposes: (1) the teacher allows the students to engage with the lesson's content, and (2) the teacher can assess the answers on each white board to immediately determine if there needs to be a change in instruction. Some examples of active participation, like a "Think-Pair-Share" are great for engagement but are difficult to get data from all students. In this example, a teacher may include a variable to effect the students' level of concern. "Think-Pair-Share" is a great way to combine a covert activity ("think") with an overt ("pair" and "share") but unless the teacher is going to listen to every single paired-share, he/she will not get a thorough assessment of the status of the entire class. To hold students accountable for the conversation, the teacher can use equity sticks, or other random answer generator to choose students to share their answers with the class. This act of choosing a student or students to share randomly is the variable the teacher used to increase the students' level of concern.

There are a wide variety of active participation strategies that can be utilized with all ages. It is important to find strategies that are both age-appropriate and offer a level of novelty and interest to the students. Teacher creativity in the use of active participation with students is often met with success. A list of active participation strategies is available in the appendix of this instructional strategies handbook but is meant to be only a beginning point to implementation of active participation. Strategies can be altered, combined, or simplified based on student need and teacher creativity. Your students will appreciate your willingness to try new strategies!

Teacher Actions That Affect

The Students Level of Concern

- * Walking around to look at answers or listen
- * "Look at me when you are ready to answer."
- * Deck of cards with names of students "luck of the draw"
- * Put names in hat draw a name
- * Pick a number count down class list (ex. every fifth student)
- * "One of you will be called on
- * "Be ready with your feelings...."
- * Examine the student's answers at the board be ready to support it or suggest another
- * "I'm going to call on four people. Be ready to add to the person's answer before you."

Related Quotes for Discussion:

"Creating opportunities for learners to share and discuss their thoughts and ideas is a key element of active processing. Vygotsky's (1978) theory of child development emphasizes social constructivism, the need for interactions between children and their social environment in order to acquire the tools in the mind. Many strategies for quick pair-shares can be used to encourage students to interact with each other." (The Motivated Brain, G. Gregory, 2015, p. 80)

"The benefits to the teacher of using all-student response systems are obvious. The teacher gets real-time information about what the class is learning. What is less obvious is that allstudent response systems also benefit students directly, because of a strange feature of human learning known as the hypercorrection effect...All-student response systems capitalize on this effect by routinely putting student in the position of committing to an answer and then later finding out whether they were right or wrong... When individuals make a commitment to a course of action, the level of dopamine in the brain increases, and this seems to increase learning. (Embedded Formative Assessment Strategies, D. Wiliam, 2015, p.80)

"When teaching and learning are visible, there is a greater likelihood of students reaching higher levels of achievement. To make teaching and learning visible requires an accomplished "teacher as evaluator and activator', who knows a range of learning strategies to build the students' surface knowledge, deep knowledge and understanding, and conceptual understanding." (Visible Learning for Teachers, J. Hattie,

2012, p.21)

"The most common error is a teacher's ubiquitous 'OK?,' with the assumption that student silence means everything is OK and they understand. For example, 'We've finished the chapter, OK?' or 'Let's move to the next section, OK?' Which student is going to be brave - or brash enough to say, 'No, that's not OK. You're going too fast!'?" (Madeline Hunter's Mastery Teaching, Hunter, 2004, p.77)

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My Personal Practice: Turn to the set of active participation strategies offered in the appendix of this handbook. Which strategies do you feel are appropriate for your age group and that allow you to both engage students AND collect data around the success of the lesson? What modifications or alterations would you make to the description of the strategy to make it most effective for your situation?

Related Resources:

- Gentile, J. R. (1993). Instructional Improvement: A Summary and Analysis of Madeline Hunter's Essential Elements of Instruction and Supervision. Oxford, OH: National Staff Development Council.
- Joyce, B., Weil, M., & Calhoun, E. (2009). *Models of Teaching*. Boston, MA: Pearson Publishing.
- Kagan, S., & Kagan, L. (2002). *Multiple Intelligence Structures to Eliminate the Achievement Gap*. San Clemente, CA: Kagan Publishing.

Gregory, G., & Kaufeldt, M. (2015). The Motivated Brain. Alexandria, VA: ASCD

Hunter, R. (2004). Madeline Hunter's Mastery Teaching. Thousand Oaks, CA: Corwin Press

Walsh, J. & Sattes, B. (2015). Questioning for the Classroom Discussion. Alexandria, VA: ASCD

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Classroom Management

The underlying principle of classroom management is "management is curriculum." Just like any other content area that we teach in the realm of academics, management is part of the curriculum for which we are responsible. Classroom management is defined as "concepts and skills needed by the teacher to plan and maintain a learning environment in which students learn those decision making skills needed to responsible for their own learning and behavior. Harry Wong writes, "Effective teachers manage their classrooms. Ineffective teachers discipline their classrooms." The effective manager does three things:

- 1. They teach the behavior they want. A teacher can't assume that the students should know how he/she wants them to behave in a given situation. You would never hold students accountable for a math concept you hadn't taught, or spelling words you had never taught. The same applies to management curriculum. A teacher must first teach the behavior before students can be held accountable for its content.
- 2. They support and promote the behavior they want. Once the behavior has been formally taught, it must be supported and promoted throughout the instructional day.
- 3. They redirect unproductive behavior.

Establishing and maintaining appropriate classroom rules, procedures, and routines is the foundation of a well-designed classroom management system and are usually individualized based on a teacher's style.

Rules	Procedures	Routines
Guidelines for behavior that	Process or method for how	Process that is completed
prevent or encourage	things are to be done in the	automatically by the student
behavior by clearly stating	classroom	without being prompted or
student expectations.		supervised.

Rules are guidelines for behavior. Their function is to prevent or encourage behavior by clearly stating student expectations. Although rules can be stated both positively or negatively, it is optimal to state a rule reflecting a positive behavioral expectation. Procedures differ from rules in that they model how a behavior is exhibited in the classroom or school setting, not just a statement defining what is expected. For example, the task of sharpening one's pencil may differ for Teacher A than for Teacher B and students need to be taught the procedure expected in the various learning environments. A routine is something the student does automatically without being prompted or supervised and typically originates from a series of established procedures that happen in the same order each day or at each occurrence. For example, Teacher A's morning routine includes accomplishing the following procedures in order: putting backpack on the designated hook, leaving homework to be checked on corner of desk, and completing the warm-up activity illuminated on the projector. Three separate procedures combined create this Teacher A's daily morning routine. Teacher B may have a different set of procedures that make up his/her established routine. Students need to learn the new procedures and routines expected every time they begin with a new teacher.

Related Quotes for Discussion:

"What you do on the first days of school will determine your success or failure for the rest of the school year. Student achievement at the end of the year is directly related to the degree to which the teacher establishes good control of the classroom procedures in the very first week of the school year (harry Wong "It takes one fool to backtalk. It takes two fools to make a conversation of it." (Tools for Teaching, F. Jones, 2005, p. 210)

"Any time that you are working harder at discipline management than the students, you will lose." (Tools for Teaching, F. Jones, 2005, p.156)

"When thoughts are guided to focus on the positive and constructive, then the self is nourished and enriched. Self-worth is intangible, and much of its cause, as well as its effect, is a matter of choosing thoughts that expand and strengthen the human psyche - rather than constrict or weaken it." (Marvin Marshall, Discipline without Stress, Punishment, or Rewards, 2005, p.3)

My Personal Practice: Will my classroom management style differ from that of teachers I have observed? If so, what will I do differently and why?

Related Resources:

- Brophy, J., & Good, T. L. (1986). Teacher behavior and student achievement. In M.C. Wittrock (Ed.), *Handbook of Research on Teaching*. New York: Macmillan.
- Curwin, R. L., Mendler, A. N. (1999). *Discipline with Dignity*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Dweck, C. (2006). *Mindset: The New Psychology of Success*. New York, NY: Random House Publishing

Gentile, J. R. (1993). Instructional Improvement: A Summary and Analysis of Madeline

Hunter, R. (2004). Madeline Hunter's Mastery Teaching. Thousand Oaks, CA: Corwin Press

- Jenson, W.R., Reavis, H. K., & Rhode, G. (1992). *The Tough Kid Book*. Longmont, Co: Sopris West.
- Jones, F. (2005). Tools for Teaching. (). Santa Cruz, CA: Frederic H. Jones & Associates, Inc.
- Kronowitz, E. (2012). *The Teacher's Guide to Success*. Upper Saddle River, NJ: Pearson Educational, Inc.
- Marshall, M. (2005). *Discipline without Stress, Punishments, or Rewards*. Los Alamitos, CA: Piper Press
- Wong, H. K., & Wong, R. T. (1998). *The First Days of School*. Mountain View, Ca: Harry K. Wong Publications. Lee Canter Assertive Discipline.

What Students Should Know and Be Able to Do

Teachers should be well-planned for each lesson taught throughout the instructional day. Daily **instructional objectives** are an important component to the planning process. Although there are many ways that instructional objectives are presented across districts, school sites, and classrooms, there are three critical components to consider in preparing an instructional objective. Essential components to an objective include:

- 1. Content: What academic or behavioral content must be learned? (Typically found within the grade level content standards)
- 2. Level of Cognition: What level and type of thinking that is expected from students during the lesson? (Many districts use Bloom's Taxonomy, Webb's Depth of Knowledge, or Costa's Levels of Thinking)
- 3. Proving Behavior: What observable and measurable activity or assignment will the students perform that will be an indicator of success? (Proving behaviors can vary greatly to include journaling, collaborative conversations, graphic organizers, role playing, along with more traditional paper/pencil activities)

Component & Definition	Questions for Teacher Preparation	Example
Content The specific content, concept, or skills that will be addressed in the lesson.	What knowledge and/or skills do I want my students to walk away with from today's lesson?	 Proper Nouns 13 colonies adding fractions with common denominators Pythagorean Theorem
Level of Cognition The level of rigor and type of thinking that will be expected of students during the lesson.	Do my standard tell me what level of cognition is expected for this content and at this grade level? Does my district or site have expectations about the types of thinking my students should be utilizing during this subject area?	 Know = list, label, match, repeat Comprehend= define, restate in own words Apply = use, make, solve
Proving Behavior The observable and measureable behavior or activity that students will perform to prove mastery of the content.	What is the most appropriate way for me to gauge where my students are with their learning of the content at the appropriate level of cognition? Have I chosen a behavior or activity that will also allow the students to self-assess their success of the learning?	 Draw characters in the story Participate in a discussion Create a graph Annotate text Write an essay

Illustration 1.2: Instructional Objective Components

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A template can be utilized to organize the three parts of an objective into a statement that can be useful to use with preparing lessons and sharing with colleagues and students. The illustration below shows a common 3-part objective template:

The learner will		
		(LEVEL OF COGNITION)
bv		(SPECIFIC CONTENT)
5 -	(OBSERV.	ABLE, RELEVANT STUDENT PROVING BEHAVIOR)

Illustration 1.3: Instructional objective template

In addition to the teacher's planning of an appropriate objective, it is important that the students also know and understand what is expected for success in the lesson and take ownership of their own progress. The term learning target is a commonly utilized variation on an instructional objective. Learning targets (Moss, 2012) add students into the equation by empowering students to take ownership of their learning. An effective learning target starts with a well-written objective but then adds elements specifically for students that:

- Compare where they are with where they need to go;
- Set specific goals for what they will accomplish;
- Choose effective strategies to achieve those goals; and
- Assess and adjust what they are doing to get there as they are doing it

The content and proving behavior are relatively straight forward, what students need to know and be able to do. The level of cognition is often where the objective writing gets more difficult. Beyond knowing what students must know (the content) and be able to do (the proving behavior), the teacher has to know how deeply or what kind of thinking is expected in order to meet the content standards. This is difficult because the teacher has to use a "backward planning" model to identify the cognitive expectations in the standards, coupled with knowledge of current cognitive levels of students, in order to plan appropriately. The understanding of two commonly known researchers, Benjamin Bloom and Norman Webb, can assist the beginning teacher in tackling the understanding of "level of cognition."

Bloom's Taxonomy was created in 1948 by psychologist Benjamin Bloom and several colleagues. Originally developed as a method of classifying educational goals for student performance evaluation, Bloom's Taxonomy has been revised over the years and is still utilized in education today. The original intent in creating the taxonomy was to focus on three major domains of learning: cognitive, affective, and psychomotor. The cognitive domain covered "the recall or recognition of knowledge"

and the development of intellectual abilities and skills"; the affective domain covered "changes in interest, attitudes, and values, and the development of appreciations and adequate adjustment"; and the psychomotor domain encompassed "the manipulative or motor-skill area." Despite the creators' intent to address all three domains, Bloom's Taxonomy applies only to acquiring knowledge in the cognitive domain, which involves intellectual skill development.

The original Bloom's Taxonomy contained six developmental categories: knowledge, comprehension, application, analysis, synthesis, and evaluation. The first step in the taxonomy focused on knowledge acquisition and at this level, students recall, memorize, list, and repeat information. In the second tier, students classify, describe, discuss, identify, and explain information. Next, students demonstrate, interpret, and write about what they've learned and solve problems. In the subsequent step, students compare, contrast, distinguish, and examine what they've learned with other information, and they have the opportunity to question and test this knowledge. Then students argue, defend, support, and evaluate their opinion on this information. Finally, in the original model of Bloom's Taxonomy, students create a new project, product, or point of view. (http://edglossary.Org/blooms-taxonomv/)

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Revised Bloom's Taxonomy

Creating
Evaluating
Analyzing
Applying
Understanding
Remembering

Illustration 1.4: Omitted, Replaced with table

More recently (1990s), "The 'Revised Bloom's Taxonomy,' as it is commonly called, was intentionally designed to be more useful to educators and to reflect the common ways in which it had come to be used in schools. In the revised version, three categories were renamed and all the categories were expressed as verbs rather than nouns. Knowledge was changed to Remembering, Comprehension became Understanding, and Synthesis was renamed Creating. In addition, Creating became the highest level in the classification system, switching places with Evaluating. The revised version is now Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating, in that order." (http://edglossary.org/bloomstaxonomv/J

Depth of Knowledge (POK) Levels

Describe Explain Interpret

Level One (Recall)	Level Two (Skill Concept)	Level Three (Strategic Thinking)	Level Four (Extended Thinking)
Arrange	Graph	Revise	Design
Repeat	Classify	Develop a Logical Argument	Connect
Recall	Separate	Apprise	Synthesize
Recite	Cause/Effect	Use Concepts to Solve Non-routine Problem	Apply Concepts
Calculate	Estimate	Critique	Critique
State	Compare	Explain Phenomena in Terms of Concepts	Analyze
Tell	Relate	Formulate	Create
Define	Infer	Hypothesize	Prove
Who, What, When, Where, Where, Why	Categorize	Draw Conclusions	
Tabulate	Collect and Display	Cite Evidence	
Recognize	Identify Patterns	Assess	
List	Organize	Construct	
Name	Construct	Compare	
Use	Modify	Investigate	
Match	Predict	Differentiate	
Illustrate	Interpret		
Measure	Distinguish		
Report	Use Context Cues		
Quote	Make Observations		
Draw	Summarize		
Identify	Show		
Memorize			
Label			

Illustration omitted, replace with table Norman Webb's Depth of Knowledge (DOK) Levels

Rigor is another word that is often utilized when discussing content standards and instructional objectives. In the template above, the term "level of cognition" can be utilized to describe the rigor of the lesson. "Depth of Knowledge also referred to as D.O.K., is the complexity or depth of understanding required to answer or explain an assessment related item or a classroom activity. The concept of depth of knowledge was developed through research by Norman L. Webb in the late 1990's. Webb identified four distinct depth of knowledge levels. The complexity of an assessment task is increasingly more difficult as the level often increases requiring multiple steps to complete." The graphic organizer here identifies possible proving behaviors that would accompany each of the DOK levels. http://teaching.about.com

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Related Quotes for Discussion:

"What is it that we want the student to learn? The selection of content, and specific learning outcomes from that content, must be the first decision in determining learning behavior that is appropriate to both the content and the learner. (Madeline Hunter's Mastery Teaching, Hunter, R., 2004, p.7)

"The practice activity should match the objective. In selecting activities for practice, it is important to analyze them for this congruence. Do the activities have the student practicing the same skill that has been taught, or is it a related skill?" (Madeline Hunter's Mastery Teaching, Hunter, R., 2004, p.93)

"Most lessons have both content and process objectives. Content objectives identify subject matter (facts, concepts, generalizations, relationships) to be mastered by students, whole process objectives specify skills and procedures students need in order to achieve content objectives or auxiliary social objectives (e.g. cooperation in a learning task)." (Models of Teaching, Joyce, B., 2009, p. 484)

"To reach a destination, you need to know exactly where you are headed, plan the best route to get there, and monitor your progress along the way. When teachers take the time to plan lessons that focus on essential knowledge and skills and to engage student in critical reasoning processes to learn that content meaningfully, they enhance achievement for all students." (Learning Targets, Moss, C., 2012, p. 13)

"When we ask teachers about their learning intentions for a particular lesson, it is common for them to reply by saying, 'I'm going to have the students do this.' In other words, teachers respond in terms of the activities in which they plan to engage their students.' This is, of course, entirely understandable. The only way that teachers get student to learn is by engaging them in activities. However, if the teachers select activities without a clear view of the learning that is intended, it is far less likely that the student will learn what they need to learn. By engaging in an activity, students usually learn something, but not all outcomes of learning are equally valuable. By being clear about what it is we want students to learn - in Stephen Covey's words, by 'starting with the end in mind' (Covey, 1989) - it is more likely that our students will learn what we need them to learn." (Embedding Formative Assessment, Wiliam, D., 2015, 27)

My Personal Practice: What information will I need to gather and what resources will I need to utilize to prepare objectives that are appropriate for my students?

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Related Resources:

Bloom, B. S. (Ed.) (1984). Taxonomy of Educational Objectives. New York: Longman.

Fisher, D. & Frey, N. *Better Learning Through Structured Teaching*. (2015). Alexandria, VA: ASCD

Gentile, J. R. (1993). *Instructional Improvement: A Summary and Analysis of Madeline Hunter's Essential Elements of Instruction and Supervision*. Oxford, OH: National Staff Development Council.

Hunter, R. (2004). Madeline Hunter's Mastery Teaching. Thousand Oaks, CA: Corwin Press

Joyce, B., Weil, M., & Calhoun, E. (2009). *Models of Teaching*. Massachusetts: Pearson.

Kronowitz, E. (2012). *The Teacher's Guide to Success*. Upper Saddle River, NJ: Pearson Educational, Inc.

Mager, R. F. (1997). *Preparing Instructional Objectives* (3rd ed.). Atlanta, Ga: CEP Press.

Moss, C. (2012). Learning Targets. Alexandria, VA: ASCD

Wiliam, D. & Leahy, S. (2015). *Embedding Formative Assessment*. West Palm Beach, FL: Learning Sciences International

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Task Analysis

Teacher planning includes several levels of preparation. Task analysis is the process of stating an objective and then factoring out the learnings that are essential to that objective. Task analysis can include long-term planning goals (i.e. scope and sequence and units of study) and short-term planning goals (i.e. daily objectives and lesson input). Districts and/or teachers use grade level content standards to design what an entire year of instruction should include within any given subject. This is typically called a scope and sequence document. From this point, district and/or teachers break the annual plan into appropriate units of study. Finally, each unit will be organized by the teacher into manageable daily objectives (or learning targets). Each objective can further be dissected into "bite-sized" information throughout the lesson delivery. No matter the size of the task you plan to analyze, Madeline Hunter provides four simple steps to task analysis (Gentile, 1993):

- 1. Formulate an instructional objective that you wish students to achieve
- 2. Clarify the meaning of that objective to determine what it is and what it isn't (includes analyzing the appropriate level of cognition for the objective related to the standards)
- 3. List essential sub-objectives which appear to be a prerequisite to the major objective through brainstorming. Purge anything on the list that does not meet this definition.
- 4. Order the essential sub-objectives in an appropriate sequence for instruction

Scope and Sequence

Unit 1, Unit 2, Unit 3, Unit 4, Unit 5, and Unit 6 Lesson 1, Lesson 2, Lesson 3, Lesson 4, & Lesson 5 Lesson Input 1, Lesson Input 2, Lesson Input 3

Illustration 1.6: Omitted

Task Analysis Process Information

Successful use of task analysis has many benefits that include (1) an increase in the probability of success, (2) an opportunity to pre-plan exactly what knowledge is needed to successfully reach the objective, (3) specificity in reporting to all stakeholders (parents, students, administration), (4) information related to decision making for next steps.

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Related Quotes for Discussion:

"First, we must determine which information is basic or essential to students' understanding of the content or process and then separate that information from information that may be desirable but is supplementary and can be acquired later. That basic information must be organized, so it becomes the scaffolding, or advance organizer, to which student can add more complex information." (Madeline Hunter's Mastery Teaching, Hunter, 2004, p.48)

"Organization facilitates understanding and retention. The research has shown that when information is organized, the retention of that information increases rather dramatically. Research also shows that it doesn't matter whether the teacher or student organizes the information. Either way the effect is the same. In many cases, the teacher, having greater mastery of content, would be the one to provide the organizational structure. In some cases, however, having the students (where appropriate) provide their own organizational structure is very beneficial to learning and remembering." (Madeline Hunter's Mastery Teaching, Hunter, 2004, p.49)

"The effective teacher recognizes academic instruction as central to his or her role. This focus on instruction guides not only the teacher's own planning and classroom behavior, but also comes across clearly to students and represents the major element in a robust learning environment. A teacher may say to students, 'It is my job to see that you succeed.' or, 'I want you to prepared for life beyond the schoolhouse door.' Although effective teachers believe that students must be challenge, they also realize that students need to experience success." (Qualities of Effective Teachers, Stronge, 2007, p. 53)

My Personal Practice: What resources does my district offer to support with task analysis? How can I find out if my school site colleagues work together to create scope and sequence documents, unit plans, or daily lessons?

Additional Resources:

Bloom, B. S. (Ed.) (1984). Taxonomy of Educational Objectives. New York: Longman.

- Fisher, D. & Frey, N. Better Learning Through Structured Teaching. (2015). Alexandria, VA: ASCD
- Gentile, J.R. (1993). Instructional Improvement: A Summary and Analysis of Madeline Hunter's Essential Elements of Instruction and Supervision. Oxford, OH: National Staff Development Council.

Hunter, R. (2004). Madeline Hunter's Mastery Teaching. Thousand Oaks, CA: Corwin Press

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Lesson Design

Planning instruction can be a complicated facet of the teaching profession. There are many models of instruction and each are utilized for various reasons. The classic definition of teaching is the design and creation of environments. Students learn by interacting with those environments and they study how to learn (Dewey, 1916). "A model of teaching is a description of a learning environment, including our behavior as teachers when that model is used." (Models of Teaching, B, Joyce, 2009, p.24). As a novice teacher, the first model of teaching to master would be direct instruction. A variation of direct instruction is typically an expectation for lesson design and delivery in many school districts and school sites. Therefore, understanding the basics of direct instruction will allow you adapt to any lesson design expectations.

A popular model of direct instruction comes from the work of Madeline Hunter as part of the Essential Elements of Effective Instruction (EEEI) curriculum documents. The EEEI lesson structure includes nine components for lesson delivery outline below in table 1.7. The table describes keys purposes for each of the lesson components and key phrases that assist both students and teacher to stay aligned with the lesson outcome.

COMPONENT	LESSON COMPONENT PURPOSE	POSSIBLE TEACHER PROMPT
Anticipatory	Draws all students' focus to the lesson by	Think back
Set	utilizing background knowledge that will	Remember
	connect to the learning by using active	Tell your partner.
	participation strategies	Write on your response board.
Objective	Engages the students in understanding	By the end of the lesson. Today you will.
	what they will know and be able to do as	
	a result of the lesson	
Purpose	Establishes the importance of the	The reason you need to know this.
_	learning, usefulness, and why	Why do you think you need to know this?
Input	Gives students the information they need	The first thing you need to know.
	to know	The next step is.
Model	Shows students what it will look like.	Watch me as I show you.
		Let me show you.
		Listen to me explain my thinking as I work

		through this problem as an example.
Check for Understanding	Monitors student understanding of the input by using active participation strategies	Before we go any further, let's look at where we are at with our learning. Show me on your white board
		Let's check to make sure we are all together. Show me a thumbs up if or show me a thumbs down if
		Respond to this statement with your opinion on your white board. I'm going to give you three minutes to respond on your white board. When you are ready, show me your answer.
Guided Practice	Provides opportunity for repetition and feedback	Let's try one together. Now you try, while I watch.
Closure	Provides opportunity for students to summarize the learning that was achieved in the lesson using active participation strategies**	It's important that we can summarize what we learned in today's lesson. On a sticky note, write down what you think were the most important learnings from today's lesson? To summarize our learning, please take your highlighter and identify the most important
		highlighter and identify the most important components to our learning today. Turn to your desk partner and see if you highlighted the same things.
Independent Practice	Provides an opportunity for practice and repetition without feedback	Now it is your turn to try it on your own. It is your turn to show what you know.

Table 1.7: EEEI Lesson Delivery Structure

Although the table above is presented in a vertical format, the body of the lesson (input, model, check for understanding, and guided practice) are meant to be repeated several times in each lesson. To accomplish this expectation visually, Long Beach Unified School District (LBUSD) has created a horizontal flow to the lesson components to illustrate the cyclical nature of the lesson delivery format. Sample lessons are included in Appendix 4c.

Terminal Objective (Plan)					
Content Standard Refere	nce				
Introduction (Plan last)			Body of Lesson (plan	2 nd)	-
Anticipatory Set	Input -> (contents/strategies)	Modeling ->	Check for -> Understanding	Guided Practice ->	Who?
Ļ					
Objective (as stated to students)					
Ļ					
Purpose					Closure
Independent Practice					

While preparing to write a lesson, you may find that the template below is helpful. The template includes teacher questions related to each component that will help you to think about what type of information or activity you will need to plan to achieve the purpose of the lesson component. Planning a lesson does not follow the same sequence as delivering a lesson. When planning, you will always start by writing a "terminal objective" which refers to what you want the students to know and be able to do by the end of the lesson. Next, you will develop the body of the lesson. The body of the lesson will move horizontally along the lesson plan. The lesson's input, model, check for understanding, and guided practice sections may repeat several times in order to categorize information into smaller sections for students to digest and teachers to continuously monitor progress of the learning. Finally, you will plan the introduction to the lesson. You will determine how you will engage students in the learning, share the learning objective and purpose, and get students involved in understanding the success criteria of the lesson.

Terminal Objectiv	Terminal Objective (plan 1st): What do I want students to learn and what activity will I have students do that will serve				
"prof" that they have learned it?					
Content Standard	Reference: List the o	content standards tha	at will addressed in t	his lesson.	
Introduction (plan last)		-	Body of Lesson (P	lan 2 nd)	-
	Input →	Modeling \rightarrow	Check for \rightarrow		Who?
			Understanding	Guided Practice	
Anticipatory Set	What information				
What question or	will students				
activity have I	need to get in this	Which parts of the	What questions		
planned to begin	lesson that is	information will	will I ask to	What practice	On your written
the lesson that	necessary to their	need examples or	determine if	have I planned for	lesson plan, this
will help students	achievement of	need to be	students	the students?	area is designated
focus on the	the lesson	modeled?	understand the		to take notes as to
lesson?	objective?		information	How will I guide	what students
			and/or examples	them? What	may need extra
\downarrow	Task Analysis:		and/or any	feedback will I	support of
	What is the	How will I	modeling?	give them?	differentiated
Telling	logical order for	do/show this?	_	_	strategies
Objective	this information	-	What active		_
objective	to be presented		participation		
How have I	to the students?		strategy can I use		
nlanned to	With every lesson		that will give me	Note: this is where	
articulate the	there are specific		the data that I	the student will	
ohiective to	places within the		need?	ultimately	
students and get	input where			demonstrate the	
students und get	there are natural			proving behavior	
ownership of their	"breaks" to model			that was planned	
own process	and check for			in the objective	
toward the	understanding			,	
objective?	before giving				
ODJECTIVE:	more input.				
1	Where are the				
<u> </u>	natural "breaks"				Closuro
Purpose	in this lesson?				ciosure
TA71 1 1 1					How will I have
wny is this lesson	What strategy				my students
important? How	(i.e. Direct				summarizo thoir
nave I planned for	teaching.				success while
students to share	Discovery,				takina
in the important	Cooperative				commitments
of the lesson?	Learning, etc.)				toward next stone
	will I use to				for learning
	deliver the				joi ieuriiiiy.
	information?				
Independent Prac	tice: What practice h	ave I planned for the	students to do indene	endently? (Without a	lidance or feedback
from the teacher)					

Related Quotes for Discussion:

"The source of input should be based on the objective (learning outcome) of the lesson. If we want student to develop social interaction skills, we'll probably want them working together rather than listening to a lecture. If the ability to identify similarities and differences is paramount, then an activity requiring them to do so is warranted. If the initial acquisition of a new formula is the focus, a skilled teacher presentation may be most effective." (Embedding Formative Assessment, Wiliam, D., 2015, 74)

"For maximum engagement, the level of difficulty of what we are having the student do must be correct. In the given curricular area, where does their prior learning leave off and new learning need to begin? At this point the level of task difficulty is correct. Students who are given work that they find unchallenging often spend much time off task doing other things, most of which we would rather they not do. If the task is too difficult, then obviously the student cannot engage in it and, again, tend to wander off into other activities." (Madeline Hunter's Mastery Teaching, Hunter, 2004, p.120)

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There are, of course, times when teachers need to check that students are secure in the knowledge they need in order to move on. But in general, question-and-answer session where the teacher just, in effect, inventories the knowledge the student hold in their heads in a rapid-fire, short-answer questions (to which the teacher already knows the answer) represent wasted opportunities to explore students' thinking. (Madeline Hunter's Mastery Teaching, Hunter, 2004, p.7)

"While having students raise their hands to show they have an answer does not make much sense, it is useful to have students give other sorts of signals to provide you with information about the kinds of contributions they want to make to the discussion. For example, some schools train their student to use different hand signals as whole-class discussions to show that they want to build on something someone else has said, as someone to explain something they have said, or put forward a different view from a previous speaker. When students use these kinds of signals, you can choose from those who are signaling, and those who are not, to create much more logically sequenced, organized, and effective classroom discussions." (Embedding Formative Assessment, Wiliam, D., 2015, 70)

"Good planning sets the stage for good teaching, which in turn fosters optimal learning. Teachers who know how to plan know precisely what they want to accomplish - or more exactly, what they want their students to accomplish. Poor planning results in no one, including the teacher, having a clear understanding of what is to be accomplished. Effective instruction starts with an organized instructional plan." (Powerful Lesson Planning Models, Skowron, 2001, p. 2)

My Personal Practice: How long do you expect to spend planning for a single lesson? How did you arrive at this number? How might this number change as your years of experience in the profession grows?

Related Resources:

Fisher, D. & Frey, N. Better Learning Through Structured Teaching. (2015). Alexandria, VA: ASCD

Hunter, R. (2004). Madeline Hunter's Mastery Teaching. Thousand Oaks, CA: Corwin Press

Joyce, B., Weil, M., & Calhoun, E. (2009). Models of Teaching. Massachusetts: Pearson.

Skowron, J. (2001). Powerful Models of Teaching. Arlington Heights, IL: SkyLight Professional Development

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Motivation

As teachers, it is our job to motivate students. That may seem tough at times. Are all students intrinsically motivated to be at school, in your classroom, ready to learn? No, probably not but that is not an excuse for teachers to say, "Well, I can't force them to learn." True, we can't force students to enjoy and want to learn the content we're teaching but there are certainly many factors and strategies that teachers can use to enhance student motivation every day and with every student.

We will define motivation as, "a state of need or desire that activates the person to do something that will satisfy the need or desire." (Hunter, 2004). Motivation theory suggest four distinct strategies for student motivation. Intrinsic motivation is not inherently good and extrinsic motivation is not inherently bad. Both are effective. The difference is that an intrinsically motivated activity will always be rewarded. Extrinsically motivated activities are rewarded in some instances, but not in others.

The table below compares the basics of extrinsic and intrinsic motivation.

Extrinsic Motivation	Intrinsic Motivation
 Not all bad Students learn for external reinforcers Rewarded in some cases, but not in others Controlled by the environment 	 Not all good Students learn for the pleasure of learning Always rewarded Controlled by the individual

Obviously, we do not need to discuss strategies to get students to be intrinsically motivated. If a student is intrinsically motivated, the reward is always there for the individual. The strategies of importance pertain to extrinsically motivating students. The hope is always that once a student feels pleasure in the learning, their desire to learn more will become intrinsic and the need for extrinsic motivators will not be necessary.

Motivation Myths

- 1. Motivation and like are synonyms.
- 2. You can't learn what you don't like.
- 3. Intrinsic motivation is more important than extrinsic motivation.

All of these statements myths. Motivation is learned. That which is learned, can be taught. Teaching is the business of teachers. Once you believe in this statement, the following four motivational strategies can and should become second nature in the classroom:

Motivation Strategy	Implementation
Level of Concern refers to how much the student cares about the learning. There is a helpful anxiety (desire to do well) and there is a harmful anxiety (feeling threatened). The amount of work, time, and visibility will affect a student's level of concern.	Amount of work: An excessive or impossible amount of work (in the eyes of the student) will discourage students from beginning the daunting task. Too little work or work that is too easy may invoke a feeling of procrastination
Too much or too little of anything and the students likely will become unproductive. To get the most motivated worker, teachers needs to balance the: • Amount of work	Amount of Time: Too much time allotted to an assignment or activity promotes procrastination. Too little time allotted to an assignment or activity feelings of helplessness.
Amount of timeAmount of visibility	Amount of Visibility: Constantly hovering over students causes anxiety in some students. Concentration is hard to acquire while someone is staring at your every move. However, complete autonomy and isolation may allow students to get off track easily and feel as though the learning is not important enough to be monitored. For every student, in every lesson, every day, finding the "just right" balance in level of concern varies.

Knowledge of Results refers to the relationship between when a student completes an assignment or activity and how quickly he/she knows how they did. Even in a behavioral situation, a student will be motivated to learn from the mistake, the quicker it is addressed.	Give brief quizzes can be corrected easily and returned promptly or daily proving behaviors that can provide data for daily instruction. Online systems are efficient and valuable because they provide students will immediate and objective feedback.
Immediate and specific results are important for motivation factors	Warning: Steer clear of returning papers with only a letter grade attached to it. Specific feedback can help students to take ownership of the learning and motivated to move forward. (See Dylan Wiliam's Embedded Formative Assessment Strategy 3: Providing Feedback That Moves Learning Forward for details in this component)
	Self-Assessment by student's own progress with the use of graphs, rubrics, and learning target accomplishments can greatly impact motivation in this area. (See Dylan Wiliam's Embedded Formative Assessment Strategy 5: Activating Students as Owners of their Own Learning for details in this component)
Success	Success promotes self-confidence. It comes from the student knowing that he is capable that he can achieve
If Students come:	today what seemed impossible the day before. Beware.
NOT KNOWING and leave still NOT	however, of planning an environment which will guarantee
KNOWING = low motivation results	success each time. In this case, the student may attribute
KNOWING and leave KNOWING the same content = low	the success to the teacher, instead of him/herself. Strive to
motivation results	present the material in even small steps in the beginning,
NOT KNOWING and leave KNOWING something new = high	graduating to more rigorous tasks.

motivation results	Instill a "growth mindset" in your students as opposed to a "fixed mindset." (See Carol Dweck's work on Growth Mindset for details in this component.)
Interest Novelty and interest, whether fleeting or long- lasting, will support higher levels of motivation	 Use varied techniques when delivering content. Change the tone of your voice, change the lighting in the room, use music as appropriate, bring in realia. Be enthusiastic about the subject Connect content to personal experiences and interests of the students Use real student's work as models Note: If you are not sure what interests are age-appropriate, ask. Students themselves are the best resource so take the time to find out and get to know your students. Interest Surveys or journal writing are helpful clues to learn about student's interests. Parents are another great resources. Ask parents during Back to School Night or parent conferences about what their kids enjoy. Parents love to know that you take interest in the "whole child" and will be more than willing to share if you take the time to learn.

Related Quotes for Discussion:

"Choice is empowering and engaging. The notion of a sense of control is equally as motivating. Innate in most learners, self-directed learning encompasses both of these critical elements of brain-friendly classroom. "In its broadest meaning, "self-directed learning" describes a process by which individuals take the initiative, with or without the assistance of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (Knowles, 1975, p.18). Dopamine release is part of the reason that self-directed learning is so engaging. It is the predictive power of success that causes the learner to focus attention and release dopamine. If the experience is new and novel, the learner is able to focus more completely." (The Motivated Brain, Gregory, 2015, p.126)

"When students are at a crystallizing moment of learning, they experience a point where attention, high interest, positive feelings, and a connection to prior successes collide. This is informally referred to as the "sweet spot" - that place where a combination of factors results in a maximum response for a given amount of effort. Skillful teachers seek the sweet spot for learning in their students by surveying prior knowledge or experience, identifying what created prior success for them, and predicting what degree of interest they might have in the task." (The Motivated Brain, Gregory, 2015, p.131)

"An activity is authentic when it has a high level of meaning for the student or is directly related to their lives, either inside or outside of school. Brain research shows that we learn very quickly and efficiently that which makes sense to learn. By teaching the skills student need to master while they are doing an authentic task - something we would do in the world outside of school- interest in the learning increases." (Madeline Hunter's Mastery Teaching, Hunter, R., 2004, p.27)

"The only thing that matters with feedback is the reaction of the recipient. That's it. Feedback - no matter - how well designed - that the student doesn't not act upon is a waste of time. This may seem obvious, but hundreds of researchers have ignored this basic truth, and tried instead to find out whether feedback should be immediate or delayed? Should it be specific or general? Should it be verbal or written? It comes down to the simple truth that the most effective feedback is just feedback that our students will actually use in improving their own learning." (Embedding Formative Assessment, Wiliam, D. & Leahy, S., 2015, 107)

"Teachers do not create learning; only learners create learning. What teachers can do is create the circumstances within which learners learn." (Embedding Formative Assessment, Wiliam, D. & Leahy, S., 2015, p.196)

"We could ask that students need to be 'ready' and motivated, and come to school well fed, having been supported at home to do their homework, and are attentive and calm. This would be wonderful, but a major role of schooling is to help student to acquire these habits; we should not discriminate against students whose parents may not know how to help them to do so." (Visible Learning for Teachers, Hattie, J. 2012, 170)

My Personal Practice: What do I know about my students that I should consider during my lesson planning that will enhance motivation?

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Related Resources:

- Costa, A. L. & Kallick, B. (2009). Habits of Mind Across the Curriculum: Practical and Creative Strategies for Teachers. Alexandria, VA: ASCD
- Dweck, C. (2006). Mindset: The New Psychology of Success. New York, NY: Random House Publishing

Gentile, J. R. (1993). Instructional Improvement: A Summary and Analysis of Madeline. Topeka, Kansas: National Staff Development Council

- Gregory, G. & Kaufeldt, M. (2015). The Motivated Brain: Improving Student Attention, Engagement, and Perseverance. Alexandria, VA: ASCD
- Hattie, J. (2012). Visible Learning for Teachers: Maximizing Impact on Learning. New York, NY: Routledge

Hunter, R. (2004). Madeline Hunter's Mastery Teaching. Thousand Oaks, CA: Corwin Press

Wiliam, D. & Leahy, S. (2015). Embedding Formative Assessment. West Palm Beach, FL: Learning Sciences International

Monitor and Adjust Process

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The monitor and adjust process may seem easily defined within in the title of the strategy. It also may seem like one quick teacher action. To monitor and adjust is actually more detailed than one expects and takes constant teacher observation and reflection throughout instruction. The process begins with the teacher's role to monitor student progress towards the objective. During this monitoring period, the teacher is making decisions about how to proceed with instruction. Questions that may enter the teacher's mind at this point include:

- Is the entire class ready to move on to the next piece of instruction?
- Are there students who could use an opportunity to talk about the content?
- Are there students who could benefit if the lesson is retaught?
- Would adding manipulatives or visuals help scaffold the learning for some or all of the students?
- Is the modeling I provided during direct instruction sufficient?
- Are there students who are advancing through the content ahead of the majority?

Monitoring the learning of the students is only the first step in the monitor and adjust process. Based on the teacher's observations and reflections on learning, adjustment to the instruction may need to be made immediately. The adjust phase of the process is most effective when adjustments have been anticipated but can also be effective "off the cuff." It is not an adjustment to instruction to simply repeat the lesson or instruction again. The different aspects of differentiation are typically in effect when adjustments are needed. Carol Ann Tomlinson has authored several books about the differentiated instruction. Tomlinson has created a graphic organizer to help teachers think about different variations and avenues to achieve the appropriate differentiated instruction for the situation.

Different of Instruction			
Is a teacher's response to learner's needs			
Guided by general principles of differentiations, such as			
respectful task	flexible grouping	ongoing assessment and adjustment	
	Teachers can differentiate		
Content	Process	Product	
	according to student's		
Reediness	Interests	Learning Profile	
through a range of instructional and management strategies such as			
multiple intelligences	tiered lessons	4MAT	
jigsaw	tiered centers	varied questioning strategies	
taped materials	tiered products	Interest centers	
anchor activities	learning contracts	Interest groups	
varying organizers	small-group instruction	varied homework	
varied texts	group investigation	Compacting	
varied supplementary materials	orbitals	varied journal prompts	
literature circles	independent study	complex instruction	

Illustration 1.7: Tomlinson's Differentiation of Instruction omitted. Replaced with table

Being able to monitor and adjust is a multi-step skill that appears to happen in a blink of an eye. A teacher follows four specific steps each and every time the monitor and adjust process is used in the classroom.

- 1) Elicit: The teacher elicits an overt active participation strategy. The strategy chosen must be a strategy where data could be gathered and that the teacher takes precautions that each student's response is his/her own and not copied/mimicked from a classmate (i.e. if a thumbs up/down strategy is used, it must be "heart-centered" (privately held close to the chest)
- 2) Check: The teacher then checks that everyone in the class is correctly eliciting one of the desired overt behaviors.
- 3) Interpret: The teacher must interpret the data that is gathered from the class. How many students provided the correct response? How many did not?
- 4) Act: the teacher will finally act upon the results of the data. A good measure of practice is that if 80-85% of the students gave a correct response, the teacher may continue you with the whole group lesson but remember to return to those students who need extra support afterwards. If less than 80-85% of the students were successful, the input needs to be retaught using an appropriate differentiation strategy.

Monitor and Adjust Process

Monitor Students' Progress: Elicit \rightarrow CHECK \rightarrow INTERPRET

Adjust Instruction: \rightarrow ACT

My Personal Practice: How can I ensure that the data I have gathered during instruction tells me an accurate story to make decisions about next steps for instruction?

Related Quotes for Discussion:

"Teachers may adapt one or more of the curricular elements (content, process, product) based on one or more of the student characteristics (readiness, interest, learning profile) at any point in a lesson or unit." (Differentiated classroom, Tomlinson, C., 1999, p.11)

"When teachers become more deliberate in the ways they check for understanding, they model the metacognitive awareness learners to develop. Metacognition is the ability of learners to "predict their performances on various tasks... and to monitor their current levels of mastery and learning (National Research Council, 2000, p. 12). While it may appear that checking for understanding is a teacher-centered strategy, in truth it empowers students to take responsibility for their won learning through monitoring and goal setting. When teachers make checking for understanding a routine part of the learning environment, they demonstrate the many ways in which to recognize that learning has occurred. Importantly, the teacher who checks for understanding transmits the message that the goal of the classroom is not just to get a grade but to learn (National Research Council, 2000)." (Checking for Understanding, Fisher, D. & Frey, N. 2007, p.135)

"All good teachers recognize that classes don't learn, students do. Nonetheless, how best to differentiate instruction and individualize for the range of student needs and abilities in the classroom is an ongoing challenge. Effective teachers tend to recognize individual and group differences among their students and accommodate those differences in their instruction (Tomlinson, 2003). They adapt instruction to meet student needs, which requires careful assessment and planning for all students in the classroom, as well as the ability to select form a range of strategies to find the optimal match to the context (Cawelti, 2004; Tomlinson 1999)." (Qualities of Effective Teachers, Stronge, J., 2007, p.70)

Related Resources:

Fisher, D. & Frey, N. (2007). Checking for Understanding: Formative Assessment Techniques for Your Classroom. Alexandria, VA: ASCD.

Gentile, J. R. (1993). Instructional Improvement: A Summary and Analysis of Madeline Hunter's Essential Elements of Instruction and Supervision. Oxford, OH: National Staff Development Council.

Hunter, R. (2004). Madeline Hunter's Mastery Teaching. Thousand Oaks, CA: Corwin Press

Stronge, J. (2007). Qualities of Effective Teachers. Alexandria, VA: ASCD

Tomlinson, C.A. (1999). The Differentiated Classroom: Responding to the Needs of all Learners. Alexandria, VA: Association for Supervision and Curriculum Development.

Walsh, J. & Sattes, B. (2015). Questioning for the Classroom Discussion. Alexandria, VA: ASCD

Section II:

Glossary of Key Pedagogical Terms for the Teaching Profession

5E Inquiry Model	An instructional model that begins with students' current knowledge and their new ideas that relate to the current knowledge. The connections between prior knowledge and new ideas slowly form concepts. According to Herbart, the best pedagogy allows students to discover relationships among their experiences. The next step involves direct instruction where the teacher systematically explains ideas that the student could not be expected to discover. Finally, the teacher provides opportunities for the student to demonstrate their understanding.
	https://bscs.org/bscs-5e-instructional-model
Academic Vocabulary	General academic vocabulary is used to refer to words that appear in texts across several
	disciplines or academic domains. For example, Townsend (2009) defined general academic
	vocabulary as words "which are used across content areas, have abstract definitions, and are
	a challenge to master" http://onlinelibrary.wiley.com/doi/10.1598AlAAL.54.L1/pdf

Accommodations	An accommodation changes the way a student receives information or is tested on the information without changing the learning goal or standard. Another way of thinking about accommodations is that they change how a student learns but not what they learn. An example of an accommodation is allowing a student with Attention Deficit Hyperactivity Disorder (ADHD) to take breaks during a test. They are still taking the same test with the same objectives, but how they accomplish the task is different.
	http://study.com/academy/lesson/modifications-for-special-education-students- definition- checklist-quiz.html

Bloom's Taxonomy	A classification system used to define and distinguish different levels of human cognition— i.e., thinking, learning, and understanding. Educators have typically used Bloom's taxonomy to inform or guide the development of assessments (tests and other evaluations of student learning), curriculum (units, lessons, projects, and other learning activities), and instructional methods such as questioning strategies. Bloom's taxonomy was originally published in 1956 by a team of cognitive psychologists at the University of Chicago. It is named after the committee's chairman, Benjamin Bloom (1913-1999). The original taxonomy was organized into three domains: Cognitive, Affective, and Psychomotor. Educators have primarily focused on the Cognitive model, which includes six different classification levels: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. In 2001, another team of scholars released a revised version of Bloom's taxonomy called A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. The "Revised Bloom's Taxonomy," as it is commonly called, was intentionally designed to be more
	Comprehension, Application, Analysis, Synthesis, and Evaluation. In 2001, another team of scholars released a revised version of Bloom's taxonomy called A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. The "Revised Bloom's Taxonomy," as it is commonly called, was intentionally designed to be more useful to educators and to reflect the common ways in which it had come to be used in schools.
	http://edglossary.org/blooms-taxonomy/

Essential Questions	Wiggins and McTighe define essential questions as "questions that are not answerable with finality in a brief sentence Their aim is to stimulate thought, to provoke inquiry, and to spark more questions — including thoughtful student questions — not just pat answers"
	(106). http://www.huffenglish.com/understanding-bv-design-essential-questions/

Formative Assessment	Formative assessment is commonly referred to as assessment for learning, in which the focus is on monitoring student response to and progress with instruction. Formative assessment provides immediate feedback to both the teacher and student regarding the learning process.
	http://www.education.com/reference/article/formative-and-summative-assessment/

California Alternate	
Assessments (CAAs)	The California Alternate Assessments (CAAs) for English language arts/literacy (ELA) and mathematics are given in grades three through eight and grade eleven. The CAAs, a part of the California Assessment of Student Performance and Progress system, have replaced the California Alternate Performance Assessment (CAPA) for ELA and CAPA for mathematics, which were eliminated in 2015. Only eligible students may participate in the administration of the CAAs. The CAPA for science in grades five, eight, and ten will continue to be administered until a replacement assessment is available. CAAs items are aligned with alternate achievement standards, which are linked with the Common Core State Standards (CCSS) for students with significant cognitive disabilities. The goals of the CAAs are to ensure that students with significant cognitive disabilities achieve increasingly higher academic outcomes and leave high school ready for postsecondary options.

California Standards for the Teaching Profession (CSTP)	The California Standards for the Teaching Profession (CSTP) are intended to provide a common language and a vision of the scope and complexity of the profession by which all teachers can define and develop their practice. The standards seek to serve and support professional educators in fulfilling their professional roles and responsibilities from preservice teacher to experienced practitioner. The standards are not set forth as regulations to control the specific actions of teachers, but rather to guide teachers as they develop, refine, and extend their practice. The CSTP have been used for a variety of purposes, including the following: (1) to prompt reflection about student learning and teaching practice; (2) to formulate professional goals to improve teaching practice in support of student learning; and (3) to guide, monitor, and assess the progress of a teacher's practice toward professional goals.
	http://www.ctc.ca.gov/eutcator-prep/stanuarus/CSTP-2009.put

Common Core State Standards (CCSS)	The Common Core is a set of high-quality academic standards in mathematics and English language arts/literacy (ELA). These learning goals outline what a student should know and be able to do at the end of each grade. The standards were created to ensure that all students graduate from high school with the skills and knowledge necessary to succeed in college, career, and life, regardless of where they live.
	http://www.corestandards.org/about-the-standards/

Differentiation	Differentiation means tailoring instruction to meet individual needs. Whether teachers
	differentiate content, process, products, or the learning environment, the use of ongoing
	assessment and flexible grouping makes this a successful approach to instruction.
	http://www.readingrockets.org/article/what-differentiated-instruction
Discovery Learning	Discovery learning is an inquiry-based, constructivist learning theory that takes place in
	problem solving situations where the learner draws on his or her own past experience and
	existing knowledge to discover facts and relationships and new truths to be learned. Students
	interact with the world by exploring and manipulating objects, wrestling with questions and
	controversies, or performing experiments. As a result, students may be more likely to
	Temember concepts and knowledge discovered on their own.
	https://www.learning-theories.com/
English Language	The California English Language Development Standards (CA ELD Standards) reflect recent
Development Standards	and emerging research and theory and are intended to support language development as
(CA ELD)	English learners (ELs) engage in rigorous academic content. The CA ELD Standards provide a
	foundation for ELS in kindergarten through grade 12 (K-12) in California schools so that each
	matter standards for college and career readiness. The Profision v Level Descriptors (DLDs)
	provide an overview of the stages of English language development through which English
	learners (ELs) are expected to progress as they gain increasing proficiency in English as a
	new language. The PLDs depict student knowledge, skills, and abilities across a continuum.
	identifying what ELs know and can do at early stages and upon exit from each of three
	proficiency levels: Emerging, Expanding, and Bridging.
	http://www.cde.ca.gov/sp/el/er/documents/eldstndspublication14.pdf
Formative Assessment	Formative assessment is commonly referred to as assessment for learning, in which the focus
	is on monitoring student response to and progress with instruction. Formative assessment
	provides immediate feedback to both the teacher and student regarding the learning process.
	http://www.education.com/reference/article/formative-and-summative-assessment/
Gifted and Talented	The California Department of Education (CDE) administers the Gifted and Talented Education

Gifted and Talented	The California Department of Education (CDE) administers the Gifted and Talented Education
Education (GATE)	(GATE) Program, which provides funding for local educational agencies (LEAs) to develop
	unique education opportunities for high-achieving and underachieving pupils in the
	California public elementary and secondary schools. Each school district's governing board
	determines the criteria it will use to identify students for participation in the GATE program.
	http://www.cde.ca.gov/sp/gt/gt/

Growth Mindset	"In a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work—brains and talent are just the starting point. This view creates a love of learning and a resilience that is essential for great accomplishment," writes Dweck. Students who embrace growth mindsets—the belief that they can learn more or become smarter if they work hard and persevere—may learn more, learn it more quickly, and view challenges and failures as opportunities to improve their learning and skills.
	http://edglossary.org/growth-mindset/

Individualized Education Program (IEP)	An IEP defines the individualized objectives of a child who has been determined to have 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 teachers and related service providers (such as paraprofessional educators)
	understand the student's disability and how the disability affects the learning process. The
	IEP describes how the student learns, how the student best demonstrates that learning and
	Developing an IEP requires accessing students in all areas related to the known disabilities
	simultaneously considering ability to access the general curriculum, considering how the
	disability affects the student's learning, forming goals and objectives that correspond to the
	needs of the student, and choosing a placement in the least restrictive environment possible
	for the student
	https://en.wikipedia.org/wiki/Individualized Education Program

Individuals with Disabilities Education Act (IDEA)	The Individuals with Disabilities Education Act (IDEA) ensures that all children with disabilities are entitled to a free appropriate public education to meet their unique needs and prepare them for further education, employment, and independent living
	http://www.apa.org/about/gr/issues/disability/idea.aspx

Learning Target	A shared learning target unpacks a "lesson-sized" amount of learning—the precise "chunk" of the particular content students are to master (Leahy, Lyon, Thompson, & Wiliam, 2005). It describes exactly how well we expect them to learn it and how we will ask them to demonstrate that learning. And although teachers derive them from instructional objectives, learning targets differ from instructional objectives in both design and function. http://www.ascd.org/publications/educational-leadership/mar11/vol68/num06/Knowing-
	Your-Learning-Target.aspx

Least Restrictive	LRE is part of the Individuals with Disabilities Education Act (IDEA). IDEA says that children
Environment (LRE)	who receive special education should learn in the least restrictive environment. This means
	they should spend as much time as possible with peers who do not receive special education.
	IDEA says two things about LRE that are important to understand when working with the IEP
	team: (1) Your child should be with kids in general education to the "maximum extent that is
	appropriate." (2) Special classes, separate schools or removal from the general education
	class should only happen when your child's learning or attention issue— his "disability"
	under IDEA—is so severe that supplementary aids and services can't provide him with an
	appropriate education. A key word here is "appropriate." It refers to what's suitable or right
	for your child. Sometimes, putting a child in a general education classroom isn't suitable
	because a specific service or program can't be provided there.
	https://www.understood.org/en/school-learning/special-services/special-education-
	basics/least-restrictive-environment-lre-what-you-need-to-know

Modifications	A modification changes the learning goal or objective. This goes beyond changing how the student learns or is tested and effectively changes what they are actually learning. A modification could change the instructional level, the content or curriculum covered, the performance criteria (objective), or the assignment structure. An example of a modification would be reducing the amount of spelling words a student is required to learn or changing an essay assignment into a poster project.
	http://study.com/academy/lesson/modifications-for-special-education-students-definition- checklist-quiz.html

Multi-Tiered Systems of Support (MTSS)	a systemic, continuous improvement framework in which data-based problem-solving and decision making is practiced across all levels of the educational system for supporting students. The framework of MTSS is a "way of doing business" which utilizes high quality evidence-based instruction, intervention, and assessment practices to ensure that every student receives the appropriate level of support to be successful. A Multi-Tiered System of Supports helps schools and districts to organize resources through alignment of academic standards and behavioral expectations, implemented with fidelity and sustained over time, in order to accelerate the performance of every student to achieve and/or exceed proficiency.
	http://www.cde.state.co.us/mtss/whatismtss
Next Generation Science Standards (NGSS)	Within the Next Generation Science Standards (NGSS), there are three distinct and equally important dimensions to learning science. These dimensions are combined to form each standard - or performance expectation - and each dimension works with the other two to help students build a cohesive understanding of science over time. The three dimensions include: (1) Crosscutting Concepts, (2) Science and Engineering Practices, and (3) Disciplinary Core Ideas.

http://www.cde.ca.gov/pd/ca/sc/ngssstandards.asp

Response to Intervention (RTI)	Response to Intervention (RTI) is a multi-tier approach to the early identification and support of students with learning and behavior needs. The RTI process begins with high- quality instruction and universal screening of all children in the general education classroom. Struggling learners are provided with interventions at increasing levels of intensity to accelerate their rate of learning. These services may be provided by a variety of personnel, including general education teachers, special educators, and specialists. Progress is closely monitored to assess both the learning rate and level of performance of individual students. Educational decisions about the intensity and duration of interventions are based on individual student response to instruction. RTI is designed for use when making decisions in both general education and special education, creating a well-integrated system of instruction and intervention guided by child outcome data.
	http://www.rtinetwork.org/learn/what/whatisrti

The Standards for Mathematical Practice describe ways in which developing student
practitioners of the discipline of mathematics increasingly ought to engage with the subject
matter as they grow in mathematical maturity and expertise throughout the elementary
middle and high school wars. The Standards for Mathematical Content are a balanced
indule and high school years. The standards for Mathematical Content are a balanced
combination of procedure and understanding. Expectations that begin with the word
"understand" are often especially good opportunities to connect the practices to the content.
Students who lack understanding of a topic may rely on procedures too heavily. Without a
flexible base from which to work, they may be less likely to consider analogous problems,
represent problems coherently, justify conclusions, apply the mathematics to practical
situations, use technology mindfully to work with the mathematics, explain the mathematics
accurately to other students step back for an overview or deviate from a known procedure
the first optimite is the state of the fourth of the power with the barrier of the state of the
to find a shortcut. In short, a lack of understanding effectively prevents a student from
engaging in the mathematical practices.
http://www.corestandards.org/Math/Practice/

The simplest definition is what it stands for, which is science, technology, engineering, and mathematics. There are many organizations that are dedicated to this topic and they define this with their own objectives. The ultimate goal of STEM education is to encourage students to take an interest in STEM subjects at an early age. This should be beneficial to them when they enter the jobs market, and in turn it should benefit the greater economy. It is a simple definition with a straight forward goal. http://www.stemschool.com/articles/what-is-stem-education
Summative assessment is commonly referred to as assessment of learning in which the focus

Summative Assessment	Summative assessment is commonly referred to as assessment of learning, in which the focus
	is on determining what the student has learned at the end of a unit of instruction or at the
	end of a grade level (e.g., through grade-level, standardized assessments). Summative
	assessment helps determine to what extent the instructional and learning goals have been
	met.
	http://www.education.com/reference/article/formative-and-summative-assessment/

Teacher Performance Expectations	The TPEs are research-based and aligned to national teaching standards expectations. They link to expectations set forth in California's adopted content standards for students. They require beginning teachers to demonstrate the knowledge, skills, and abilities to provide safe, healthy, and supporting learning any important to meet the peeds of each and supervistudent
	and to model digital literacy and ethical digital citizenship. In addition, the TPEs explicitly require beginning teachers to know and be able to apply pedagogical theories, principles, and instructional practices for the comprehensive instruction of English learners. They know and
	can apply theories, principles, and instructional practices for English Language Development to assist students to achieve literacy in English within the content area(s) of their credential(s). They create inclusive learning environments, in person or online, and use their understanding of all students' developmental levels to provide effective instruction and
	assessment for all students, including students with disabilities in the general education classroom.
	http://www.ctc.ca.gov/educator-prep/standards/adopted-TPEs-2016.pdf

Universal Design for	A set of principles for curriculum development that give all individuals equal opportunities to
Learning (UDL)	learn. UDL provides a blueprint for creating instructional goals, methods, materials, and
	assessments that work for everyonenot a single, one-size-fits-all solution but rather flexible
	approaches that can be customized and adjusted for individual needs. The three principles of
	UDL are: (1) Provide Multiple Means of Representation, (2) Provide Multiple Means of Action
	and Expression, and (3) Provide Multiple Means of Engagement
	http://www.udlcenter.org/aboutudl/whatisudl

Webb's Depth of Knowledge (DOK)	Depth of Knowledge also referred to as DOK, is the complexity or depth of understanding required to answer or explain an assessment related item or a classroom activity. The concept of depth of knowledge was developed through research by Norman L. Webb in the late 1990's. Webb identified four distinct depth of knowledge levels. The complexity of an assessment task is increasingly more difficult as the level often increases requiring multiple steps to complete.
	http://teaching.about.com/od/A-ITeachingGlossary/g/Depth-Of-Knowledge.htm

Section III:

Teacher Preparation Alignment

Overview: Upon completion of your preliminary credential program and in tandem with your first teaching position, you will be expected to complete an approved Induction Program in order to receive your clear credential during your first and second year as the teacher of record. Once in the teaching profession, you will transition from utilizing the Teacher Performance Expectations (TPE) to the California Standards for the Teaching Profession (CSTP). A full comparison of these standards' is located in the appendix. Although these two sets of standards are aligned in overall content, the transition illuminates the differences in expectations of a teacher-in-training and those of a novice teacher-of-record. Prior to completion of your preliminary credential program, you will complete an "Individual Plan for Transition to Induction" document with your university supervisor that will accompany you to your intake meeting with your Induction Coordinator or Support Provider. This transition document will help to make your Induction experience to be tailored to your individual needs.

In preparing for the adventure of looking for and securing full-time employment in teaching, there are several tips to keep in mind while researching districts for your first teaching assignment. Depending on the climate of the job market in your preferred geographical area, you may or may not have the luxury to make decisions about your first teaching job based on the available Induction Programs in the area, it is helpful to be armed with knowledge about Induction.

KNOW	D0
Not all districts offer an Induction Program.	Research Induction scenario prior to your different interviews:
Not all Induction Programs:	• Does the district offer an Induction Program for
• have the same application or enrollment process.	your credential?
• have the same fees to participate.	• Is there a fee to participate?
• are equal in length or rigor.	• When is the expected start date?
• follow the same curriculum or the same criteria for completion.	
are accredited for ALL credentials areas.	
• But all Induction Programs must be accredited by the state of California and must follow the same set of standards!	

Once you've accepted your first teaching assignment, you will need to inquire about the following components regarding your upcoming Induction experience:

- How, when, and to whom do you enroll in the Induction Program?
- What materials will be required as part of your enrollment paperwork?
- If they DO offer a program in your credential area, you need to know if it is mandatory to participate in the district program or if you may enroll elsewhere.
- If a district does not offer a program for the credential you need to clear, they will provide you with a CL8S5 letter to take to another institution for enrollment. They may also be able to help you find another option.
- Enroll immediately! Programs WILL fill!

INDIVIDUAL PLAN FOR TRANSITION TO INDUCTION California State University, Long Beach

Directions: With your University Supervisor and/or Master Teacher, discuss your student teaching experience and evaluation(s), the Teacher Performance Expectations (TPE) and corresponding Teacher Performance Assessment (TPA) results, and university course content and grades. Reflect upon strengths, potential areas of growth, and professional interests leading into your first teaching position. Use the space below (and additional pages as needed) to write detailed notes in each area that can be shared with your future Induction Program Coordinator. Be sure to address areas of professionalism, lesson design and assessment, lesson implementation and assessment, and classroom management. Your documented reflection on this form will support the creation of an Individualized Learning Plan (ILP) during your Induction experience.

Identify your top three strengths and describe evidence to support your claim:

Identify three potential areas of growth and describe evidence to support your claim:

Identify three professional areas of interest. Think about potential topics for further exploration or study related to the field of education:

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TPE 1: Engaging and Supporting All Students in Learning

- 1. Apply knowledge of students, including their prior experiences, interests, and socialemotional learning needs, as well as their funds of knowledge and cultural, language, and socioeconomic backgrounds, to engage them in learning.
- 2. Maintain ongoing communication with students and families, including the use of technology to communicate with and support students and families, and to communicate achievement expectations and student progress.
- 3. Connect subject matter to real-life contexts and provide active learning 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 of Learning

(UDL) and Multi-Tiered System of Supports (MTSS) to support access to the curriculum for a wide range of learners within the general education classroom and environment.

- 5. Promote students' critical and creative thinking and analysis through activities that provide opportunities for inquiry, 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, and structured English immersion, and demonstrate an understanding of the difference among 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.
- 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.

CSTP 1: Engaging and Supporting All Students in Learning

- 1.1 Using knowledge of students to engage them in learning
- 1.2 Connecting learning to students' prior knowledge, backgrounds, life experiences, and interests
- 1.3 Connecting subject matter to meaningful, real-life context
- 1.4 Using a variety of instructional strategies, resources, and technologies to meet students' diverse learning needs.
- 1.5 Promoting critical thinking through inquiry, problem-solving, and reflection
- 1.6 Monitoring student learning and adjusting instruction while teaching

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TPE 2: Creating and Maintaining Effective Environments for Student Learning

- 1. Promote students' social-emotional growth, development, and individual responsibility using positive interventions and supports, restorative justice, and conflict resolution practices to foster a caring community where each student is treated fairly and respectfully by adults and peers.
- 2. Create learning environments (i.e., traditional, blended, and online) that promote productive student learning, encourage positive interactions among students, reflect diversity and multiple perspectives, and are culturally responsive.
- 3. Establish, maintain, and monitor inclusive learning environments that are physically, mentally, intellectually, and emotionally healthy and safe to enable all students to learn, and recognize and appropriately address instances of intolerance and harassment among students, such as bullying, racism, and sexism.

- 4. Know how to access resources to support students, including those who have experienced trauma, homelessness, foster care, incarceration, and/or are medically fragile.
- 5. Maintain high expectations for learning with appropriate support for the full range of students in the classroom.
- 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.

CSTP 2: Creating and Maintaining Effective Environments for Student Learning

- 2.1 Promoting social development and responsibility with a caring community where each student is treated fairly and respectfully
- 2.2 Creating physical or virtual learning environments that promote student learning, reflect diversity, and encourage constructive and productive interactions among students
- 2.3 Establishing and maintaining learning environments that are physically, intellectually, and emotionally safe
- 2.4 Creating a rigorous learning environment with high expectations and appropriate support for all students
- 2.5 Developing, communicating, and maintaining high standards for group behavior
- 2.6 Employing classroom routines, procedures, norms, and supports for positive behavior to ensure a climate in which all students can learn
- 2.7 Using instructional time to optimize learning

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TPE 3: Understanding and Organizing Subject Matter for Student Learning

- 1. Demonstrate knowledge of subject matter, including the adopted California State Standards and curriculum frameworks.
- 2. Use knowledge about students and learning goals to organize the curriculum to facilitate student understanding of subject matter, and make accommodations and/or modifications as needed to promote student access to the curriculum.
- 3. Plan, design, implement, and monitor instruction consistent with current subjectspecific pedagogy in the content area(s) of instruction, and design and implement disciplinary and cross-disciplinary learning sequences, including integrating the visual and performing arts as applicable to the discipline.
- 4. Individually and through consultation and collaboration with other educators and members of the larger school community, plan for effective subject matter instruction and use multiple means of representing, expressing, and engaging students to demonstrate their knowledge.
- 5. Adapt subject matter curriculum, organization, and planning to support the acquisition and use of academic language within learning activities to promote the 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. 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, understanding fair use guidelines and the use of Creative Commons license, and maintaining Internet security.
- 8. Demonstrate knowledge of effective teaching strategies aligned with the internationally recognized educational technology standards.

CSTP 3: Understanding and Organizing Subject Matter for Student Learning

- 3.1 Demonstrating knowledge of subject matter, academic content standards, and curriculum frameworks
- 3.2 Applying knowledge of student development and proficiencies to ensure student understanding of subject matter
- 3.3 Organizing curriculum to facilitate student understanding of the subject matter
- 3.4 Utilizing instructional strategies that are appropriate to the subject matter
- 3.5 Using and adapting resources, technologies, and standards-aligned instructional materials, including adaptive materials, to make subject matter accessible to all students.
- 3.6 Addressing the needs of English learners and students with special needs to provide equitable access to the content

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

- 1. Locate and apply information about students' current academic status, content-and standards-related learning needs and goals, assessment data, language proficiency status, and cultural background for both short-term and long-term instructional planning purposes.
- 2. Understand and apply knowledge of the range and characteristics of typical and atypical child development from birth through adolescence to help inform instructional planning and learning experiences for all students.
- 3. 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, as applicable to the subject area of instruction.

linguistically, and culturally appropriate learning activities, instructional materials, and resources for all students, including the full range of English learners; •appropriate modifications for students with disabilities in the general education classroom; • opportunities for students to support each other in learning; and • use of community resources and services as applicable.

- 5. 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, and 504 plans.)
- 6. 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.
- 7. 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.
- 8. Use digital tools and learning technologies across learning environments as appropriate to create new content and provide personalized and integrated technology-rich lessons to engage students in learning, promote digital literacy, and offer students multiple means to demonstrate their learning.

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

- 4.1 Using knowledge of students' academic readiness, language proficiency, cultural background, and individual development to plan instruction
- 4.2 Establishing and articulating goals for student learning
- 4.3 Developing and sequencing long-term and short-term instructional plans to support student learning
- 4.4 Planning instruction that incorporates appropriate strategies to meet the learning needs of all students
- 4.5 Adapting instructional plans and curricular materials to meet the assessed learning needs of all students

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TPE 5: Assessing Student Learning

- 1. Apply knowledge of the purposes, characteristics, and appropriate uses of different types of assessments (e. g., diagnostic, informal, formal, progress-monitoring, formative, summative, and performance) to design and administer classroom assessments, including use of scoring rubrics.
- 2. Collect and analyze assessment data from multiple measures and sources to plan and modify instruction and document students' learning over time.
- 3. Involve 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.

- 4. Use technology as appropriate to support assessment administration, conduct data analysis, and communicate learning outcomes to students and families.
- 5. Use assessment information in a timely manner to assist students and families in understanding student progress in meeting learning goals.
- 6. Work with specialists to interpret assessment results from formative and summative assessments to distinguish between students whose first language is English, English learners, Standard English learners, and students with language or other disabilities.
- 7. Interpret English learners' assessment data to identify their level of academic proficiency in English as well as in their primary language, as applicable, and use this information in planning instruction.
- 8. Use assessment data, including information from students' IEP, IFSP, ITP, and 504 plans, to establish learning goals and to plan, differentiate, make accommodations and/or modify instruction.

CSTP 5: Assessing Students for Learning

- 5.1 Applying knowledge of the purposes, characteristics, and uses of different types of assessments
- 5.2 Collecting and analyzing assessment data from a variety of sources to inform instruction
- 5.3 Reviewing data, both individually and with colleagues, to monitor student learning
- 5.4 Using assessment data to establish learning goals and to plan, differentiate, and modify instruction
- 5.5 Involving all students in self-assessment, goal setting, and monitoring process
- 5.6 Using available technologies to assist in instruction, analysis, and communication of student learning
- 5.7 Using assessment information to share timely and comprehensible feedback with students and their families

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TPE 6: Developing as a Professional Educator

- 1. Reflect on their own teaching practice and level of subject matter and pedagogical knowledge to plan and implement instruction that can improve student learning.
- 2. Recognize their own values and implicit and explicit biases, the ways in which these values and 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. They exhibit positive dispositions of caring, support, acceptance, and fairness toward all students and families, as well as toward their colleagues.
- 3. Establish professional learning goals and make progress to improve their practice by routinely engaging in communication and inquiry with colleagues.
- 4. Demonstrate how and when to involve other adults and to communicate effectively with peers and colleagues, families, and members of the larger school community to support teacher and student learning.

- 5. Demonstrate professional responsibility for all aspects of student learning and classroom management, including responsibility for the learning outcomes of all students, along with appropriate concerns and policies regarding the privacy, health, and safety of students and families. Beginning teachers conduct themselves with integrity and model ethical conduct for themselves and others.
- 6. Understand and enact professional roles and responsibilities as mandated reporters and comply with all laws concerning professional responsibilities, professional conduct, and moral fitness, including the responsible use of social media and other digital platforms and tools.
- 7. Critically analyze 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.
- CSTP 6: Developing as a Professional Educator
- 6.1 Reflecting on teaching practice in support of student learning
- 6.2 Establishing professional goals and engaging in continuous and purposeful professional growth and development
- 6.3 Collaborating with colleagues and the broader professional community to support teacher and student learning
- 6.4 Working with families to support student learning
- 6.5 Engaging local communities in support of the instructional program
- 6.6 Managing professional responsibilities to maintain motivation and commitment to all students
- 6.7 Demonstrating professional responsibility, integrity, and ethical conduct

Section IV:

Appendix

4a: Active Participation Toolbox

A-B Partner Teach

With designated roles in place, the teacher can ask A-B partners to complete various tasks in an effective, efficient time frame.

- Partner A, tell Partner B the two most important things you have learned so far about. Partner B add two more details after Partner A has shared.
- Partner A, define ____ in your own words. Partner B will then give two examples of ____.
- Partner B, list 3 sources of renewable energy. Partner A, list 3 sources of non-renewable energy

Attentive Listening

Students put their pencils down during the teacher input and are not allowed to take notes as the teacher is giving content information. After each step of input, (every 2-3 minutes) the teacher stops giving instruction. The students pick up pencils and write the crucial input given in the last few minutes in their notebooks.

Color-Coded Choices

Put colored sticker dots on students' desks, 3x5 cards, or nametags. Each color represents a possible answer to a question from the teacher. Student puts their finger on the answer they choose.

- "If you think it is a fact, cover red dot with your index finger. On green, if you think it is an opinion."
- "If you choose 'A' cover the red dot. 'B' cover the yellow dot...etc."
- "Cover the red dot if your answer was ____. Cover the blue dot if your answer was ___. Cover yellow dot if you got ____."
- "Vote by covering the appropriate dot. Blue if. Green if....etc."

Clock Appointments

Students make appointments with other students at various times directed by teacher. As teacher calls a specific appointment time, students meet with their designated appointment and discuss a given question or topic posed by teacher.

Clock Image Omitted

"Please find your 3:00 appointment. Discuss your thoughts to the question on the board."

Cloze Activity

Use fill in the blank while giving input to the students. Allow students to try to fill in the blank on their own first. Scaffold support by adding one letter a time until the students can figure out how the blank should be filled.

- "_____ is the term we use to describe a number written out in words."
- "_e____t_o_is the term we use when we give human characteristics to non-human animals or objects."
- "The definition of synonyms are _____ that are very close in _____. On the other hand, _____ are words that are _____ in meaning."

Exit Slip/ Evidence Bag

- 1 What made learning easy for you today?
- 2 What made learning difficult for you today?
- 3 What do you still need to know before we move on?
- 4 What did you learn today?
- 5 What should our next steps be?

Students can answer self-selected question/s or teacher selected question/s using sticky notes, white boards, scraps of paper, journals, etc.

Fishbowl

This strategy provides students an opportunity to engage in formal discussion and to experience roles both as participant and as active listener; students also have the responsibility of supporting their opinions and response using specific textual evidence.

- Students are asked to engage in a group discussion about a specific topic there will be two circles: (Circle image omitted).
- Inner circle students will model appropriate discussion techniques... while the
- Outer circle students will listen, respond and evaluate.

Four Corners

The teacher posts questions, quotations, photos, etc. in each of the corners of the room. The teacher assigns each student to a corner. or students choose.

- Once in the corner, the students discuss the focus of the lesson in relation to the question, quote, etc.
- At this time, students may take notes, report out, or move to another corner and repeat the process.
- After students have moved or completed the activity, they should be encouraged to reflect on changes in their understanding of the content

Gallery Walk

- Select several "quotable quotes," important passages, or concepts from a text and place each quote or passage on a separate piece of butcher or chart paper and hang them throughout the room.
- Ask students to quietly take a "gallery walk," reading each poster carefully and talking to no one.
- Have each student select one that interests or intrigues them one that they would like to talk more about.
- Ask the students to return to their seats and write about the selected quote.
- Then ask students to take their writing and stand by the quote or passage they have selected. Distribute a marker to each group. Using their free-writing as a point of departure for discussion, they form a discussion group, sharing and piggy backing ideas. Their thoughts are recorded on the chart paper.

• Each group shares their charted responses with the entire class and invites the larger class to add comments or to ask questions. After each group shares, students are given time to write their own responses for each quote or passage.

Graphic Organizers

A graphic organizer is a communication tool that uses visual symbols to express knowledge, concepts, thoughts, or ideas, and the relationships between them. The main purpose of a graphic organizer is to provide a visual aid to facilitate learning and instruction. Many districts use Thinking Maps[®] but other common graphic organizers include Venn Diagrams and concept maps.

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Hand Signals

Teacher asks for a response from class with a private gesture with the hands. Most effective to teacher (as a check for understanding) when students keep gestures close to their chest so other students can't see their answer. Examples include:

- Thumbs up/down
- Open/closed fist
- One finger/two fingers
- Arms crossed/uncrossed

Idea Wave

- Each student lists 3 to 5 ideas about the assigned topic.
- A volunteer begins the "idea wave" by sharing one idea
- The student to the right of the volunteer shares one idea; the next student to the right shares one idea.
- The teacher directs the flow of the "idea wave" until several different ideas have been shared.
- At the end of the formal "idea wave," a few volunteers who were not included can contribute an idea.

Jigsaw

- Students read different passages from the same text (or selections from several texts) becoming the expert with the specified text.
- The "experts" lead discussion or share the information from their specific reading with a specific group or the entire class.

K - W - W - L

What I Know - Where I learned it - What I want to know - What I Learned

This strategy helps students organize, access, and reflect on learning which increases comprehension and engagement.

- To activate prior knowledge ask, "What do I know?"
- To acknowledge source ask, "Where did I find the information?
- To set purpose ask, "What do I want to know?"
- To reflect on a new learning ask, "What did I learn?"

Numbered Heads

- Students number off in teams, one through four.
- Teacher asked a series of questions, one at a time.
- Students discuss possible answers to each question, for a set amount of time (30-90 seconds).
- Teacher calls a number (1-4), and all students with that number raise their hand, ready to respond.

Learning from A to Z

- The objective of this activity is to provide words, phrases, or sentences that are related to the topic that is being studied.
- While taking notes on a topic or during an academic conversation, the students listen for important words that start with each word of the alphabet.
- After the instruction is provided, the students have the ability to share with peers words that they wrote down in their A-Z list and fill-in any gaps or discuss their choices

Post-It Voting

Students use sticky notes with their initials to vote or comment and put up in designated area of white board or voting chart. Can be used:

- used to give rubric scores for an anchor paper
- Multiple Choice answers
- Categorizing information/input
- Collect class data for upcoming unit of study (pre-test option)

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Quick-write / Reflection

Use a quick-write to activate background knowledge, clarify issues, facilitate making connections, and allow for reflection. • Students write for a short, specific amount of time about a designated topic related to...

Socratic Seminar

Use a Socratic Seminar to help students facilitate their own discussion and arrive at a new understanding in which they learn to formulate questions and address issues in lieu of just stating their opinions. Students engage in a focused discussion in which they ask questions of each other on a selected topic; questions initiate the conversation which continues with a series of responses and further questions.

Spectrum

- Use a spectrum when asking for student opinions on a topic or question.
- Place a line on the chalkboard or masking tape on the floor in front of the room.
- Label one end of the line "Strongly Agree" and the other end "Strongly Disagree."
- Students line up according to their opinion on the topic, most important/least important, greatest effect/least effect, expert/knowledge line (level of student expertise.)

Talking Chips

Students are in small groups.

Pose a question for students to discuss.

- Each member is given a "chip" (small of construction paper or a "real chip")
- Each student takes turns "talking" by placing their
- CHIP into the center of the table.
- The first person to talk may only talk at that time and may not speak again until all in the group members have placed their "chip" in the middle.

Think - Pair - Share

- THINK: Take a minute to first silently and independently think about your own answer to the question(s).
- PAIR: turn and face your partner so you can discuss your answers face to face. Listen carefully to your partner's answers, and pay attention to similarities and differences in your answers. Ask for clarifications.
- SHARE: Be prepared to share your opinions with the class.

What's the Same/Different?

This strategy involves simply asking students to compare two or more items and describe how they are the same or different. Excellent as an anticipatory set to activate prior knowledge or build background knowledge. Examples include:

- protagonists and antagonists
- leaders and followers
- rectangles and squares
- narrative writing and persuasive writing
- verbs and adverbs
- evaporation and absorption
- hills and valleys

Whip Around

Teacher whips around the room quickly until getting an oral answer/comment from each student. Hint: Students should write down an answer to a question on scratch paper ahead of time so no extra think time is needed during the whip around.

Word Summaries

Students write or orally discuss input from a lesson or knowledge about a topic by summarizing information as directed by the teacher. Examples include:

- Use exactly 3 words to describe the definition of an adverb.
- Choose exactly 5 adjectives to describe the attributes of a square.
- In no more than 20 words, summarize the
- Most important aspects from today's lesson.
- Use 10 words to introduce the main character in the story to a partner

<u>4b: Horizontal Lesson Template</u>

Horizontal Lesson Template (Direct Instruction)

Terminal Objective (plan 1 st):					
Content Standards Reference:					
Introduction (plan last)		Body o	of Lesson (plan 2nd)		
Anticipatory ↓	Input → (content/strate gy)	Modeling →	Check for Understanding →	Guided Practice →	Who?
Objective					Closure
Purpose					
Independent Practice:					

4c: Sample Lesson Plans

Vocabulary Strategies Lesson

Terminal Objective: Given a non-fiction article and appropriate graphic organizers, students will analyze vocabulary words by using strategies (word structure, context clues, apposition, and prior knowledge) and discussing word meanings with peers

Content Standard Reference:

- CCSS ELA 3.L.3, 3.L.4, 3.L.5
- ELD Mode of Language Interpretive: Expanding/Bridging
- ELD Knowledge of Language-Metalinguistic Awareness: Bridging

Introduction	Body of Lesson				
Anticipatory Set	Input	Model	Check for Understanding	Guided Practice	Who?
What do you do when you come across words you don't know when you are reading?	1. Explain tools and process for lesson	1. Show circle Map and create tree map for notes	1. Point to various tools for lesson and discuss with partner	1. X	
AP: white boards	2. Word Structure	2. Distribute affixes "cheat sheets" and model sample	2. Highlight known affixes	2. Worksheet to practice	
	3. Context Clues	3. When I walk around, how will I know that you have found some context clues in the sentence?	3. When I walk around, how will I know that you have found some context clues in the sentence?	3. Practice using sample sentences	
Telling Objective and Purpose	4. Apposition	4. Show a sample sentence	4. What clues in a sentence tell you it might include apposition?	4. Practice using sample sentences	
Today we are going to learn 4 new vocabulary strategies to help us figure out what a	5. Prior Knowledge	5. Model with silly restaurant menu items "Blizzard" "Lava Cake" "Blooming Onion	5. How are context clues and PK similar?	5. X	
the dictionary to help us. You will know you are successful if you are able to use your	6. Candy Engineer Article	6. Use circle map to model how to find meaning to new vocabulary words	6. Explain directions to a partner	6. Use circle map to determine new vocabulary words from article	Exit Slip: On a post it, what
an article	7. Explain Mix/Freeze/ Match	7. Model Mix/Freeze/Match	7. Confirm understanding using T/P/S	7. Mix/Freeze/Match Activity (Accountability/ Level of Concern	win you personally commit to trying the next time you come across a word in your reading that you don't know?
Independent Practice: Studen	t will use circle maps to a	analyze new vocabulary words usin	ig an article from the newspaper f	for homework	·

Procedure Lesson: Entering the Classroom

Terminal Objective: Given a step-by-step tutorial, students will know the steps to enter the classroom according to the prescribed procedure without error.					
Introduction			Body of Lesson		
Anticipatory Set	Input	Modeling	Check for	Guided Practice	Who?
Think for a minute about this scenario. You are outside a movie theater. You are waiting for the ticket booth to open. There is a large group of people waiting, but there is no line. Finally one ticket window opens and everyone runs to it. What problems will start to arise? Lead students to discuss pushing, shoving, people getting hurt, people having a difficult time actually buying a ticket, or hearing any announcements because of the chaos. Just like there are steps we have to follow to enter the movie theater, there are steps we have to follow to enter our classroom.	 (content/strategy) Students will line up single file, against the outside of the classroom (line up) Students will greet the teacher at the door (greet teacher) Student will take the most direct route to their seats (go directly to seat) Upon arriving at their seats, students will quietly pull out their own chair and sit down immediately (sit down quietly) 	 Teacher show/explains location of line-up, and has a small group come up to demonstration what a single-file line means Teacher shows how teacher and student will greet one another. We will shake hands and say "Good Morning" or "Hello." Teacher has volunteers demonstrate how it will look and sound. Teacher show what "take the most direct route" means. Teacher asks for volunteers who can demonstrate the most direct route to their seats. Teacher uses a desk and chair to demonstrate "sit down quietly." 	 Understanding Visualize where you will be lining up outside. Turn to your partner and pretend that one of you is the teacher and one is he student. Practice greeting one another. Image yourself walking in the most direct route to your seat. Discuss your direct route with your partner and see if you agree. Give me a thumbs up or a thumbs down (heart- centered) if I modeled sitting down quietly. Techer may model it incorrectly first and see if students recognize mistakes. 	 During this part of the lesson, the entire class will practice the procedure from beginning to end, until the teacher determine mastery. During this practice, it is important that the students have repetition of the procedure with appropriate feedback and guidance from the teacher, so that the objective is met. 	Closure Imagine that we have a new student arriving tomorrow. If I ask you to explain how we enter this classroom to the new students, what will you say? Have partners review.
	F F F F F F F F F F F F F F F F F F F				

Pre-writing Using Graphic Organizer

Terminal Objective (plan 1st):

Students will use a combination of drawing, dictating, and writing to compose and sequence a single fictional event by completing a graphic organizer that includes a topic and three corresponding details.					
Content Standards Reference:					
WK.2 Use a combination of drawing, dictating, a	nd writing to compose informative/	explanatory' texts in which they name what	at they are writing about and suppl	y some information about the top	ic
WK.3 Use a combination of drawing, dictating, a	nd writing to narrate a single event	or several loosely linked events, tell about	the events in the order in which th	ey occurred, and provide a reactio	n to what happened.
SLK.4 Describe familiar people, places, things, a	nd events and, with prompting and s	support, provide additional detail.			
SLK.5 Add drawings or other visual displays to	lescriptions as desired to provide ad	lditional detail.			
Introduction (plan last)	1	Body	y of Lesson (plan 2 nd)		T
Anticipatory Set	Input ->	Modeling	Check for Understanding	Guided Practice	Who?
Teacher reads The Wind Blew to the students	(content? strategy)		4 min 1 (n + (n)		
and activates prior knowledge about the	1 Developing a tania	1. Orally share an idea for a topic on	1. Think/Pair/Share	1. Students decide their	
effects of windy weather.	Developing a topic Determining supporting	graphic organizer (windy day on a	 Gestures: Snow me now menu dataila Laddad to 	own topic and share	
Objective	2. Determining supporting dotails	2 Orally share three silly ideas to	many details I added to	2 Students determine three	
(as stated to students)	3 Introduce graphic organizer	2. Orally share three siny ideas to include as details (nig tractor and	3 Choral response	2. Students determine three supporting details	
"To dou use and going to start a uniting activity	and procedures for using	farmer blew away)	4. X	3. X	
but before we can start writing we need to	graphic organizer	3. Model using a graphic organizer	5. Gestures: Students point	4. X	
complete a pre-writing activity "	Explain level of detail	4. Draw and talk about details while	to each part of the	5. Students complete	
Complete a pre-writing activity.	expected for proving,	adding them to graphic organizer	graphic organizer while	graphic organizer with	Closure
Purpose	behavior	5. Point to each part of the graphic	teacher discusses	pictures related to topic	
"Pre-writing helps us to organize our	Reviews entire process	organizer and orally retell the		and three details	Students return to the
thoughts before we start to write Using the		process for student to follow			rug for a final student
tool I'm going to show you with nictures is an					activity about the
easy way to think about our writing"					topic and three
cuby may to timin about our mining.					details each chose in
					their prewriting
					activity
Independent Practice: Students will use pre-write	ting graphic organizer as they write	a corresponding story during the remaining	ng days of the week.		

(Image Omitted)

California Common Core State Standards English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

4d: Sample Standards - CCSS ELA and Math

Reading Standards for Informational Text K-5

	Kindergartners	Grade 1 Students	Grade 2 Students
Key Ideas and Details	 With prompting and support, ask and answer questions about key details in a text. With prompting and support, identify the main topic and retell key details of a text. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. 	 Ask and answer questions about key details in a text Identify the main topic and retell key details of a text. Describe the connection between two individuals, events, ideas, or pieces of information in a text. 	 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. Identify the main topic of a multi paragraph text as well as the focus of specific paragraphs within the text. Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
Craft and Structure	 With prompting and support, ask and answer questions about unknown words in a text, (See grade K Language standards 4-6 additional expectations.) CA Identify the front cover, back cover, and title page of a book. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text. 	4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. (See grade 1 Language standards 4-6 for additional expectations.) CA 5. Know and use various text structures (e.g., sequence) and text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. CA 6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.	 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area. (See grade 2 Language standards 4-6 for additional expectations.) CA Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently. Identify the main purpose of a text, including what the author wants to answer, explain, or describe.
Integrations of Knowledge and Ideas	 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts). With prompting and support, identify the reasons an author gives to support points in a text. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures). 	 Use the illustrations and details in a text to describe its key ideas. Identify the reasons an author gives to support points in a text Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures). 	 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text. Describe how reasons support specific points the author makes in a text. Compare and contrast the most important points presented by two texts on the same topic.

	Grade 3 Students	Grade 4 Students	Grade 5 Students
Integrations of Knowledge and Ideas	 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/ third in a sequence). Compare and contrast the most important points and key details presented in two texts on the same topic. 	 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. Explain how an author uses reasons and evidence to support particular paints in a text. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably. 	 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
Rang of Reading and Level of Text Complexity	 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2-3 text complexity band independently and proficiently. 	 By the end of year, read and comprehend Informational texts, including history/social studies, science, and technical texts, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range. 	 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.

California Common Core State Standards

Mathematics Electronic Edition

www.cde.ca.gov

Grade 1

Structuring the Standards for Mathematical Practice¹

Overarching habits of mind of a productive mathematical thinker

- 1. Make sense of problems and persevere in solving them.
- 6. Attend to precision.

Reasoning and explaining

- 2. Reason abstractly and quantitatively.
- 3. Construct triable arguments and critique the reasoning of others.

Modeling and using tools

- 4. Model with mathematics.
- 5. Use appropriate tools strategically.

Seeing structure and generalizing

- 7. Look for and make use of structure.
- 8. Look for and express regularity in repeated reasoning.

Grade 1

Operations and Algebraic Thinking -- 1.0A

Represent and solve problems involving addition and subtraction.

- 1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
- 2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction.

- Apply properties of operations as strategies to add and subtract.³ Examples: If 8 + 3 11 is known, then 3 + 8 -11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4-2 + 10-12. (Associative property of addition.)
- 4. Understand subtraction as an unknown-addend problem. For example, subtract 10-8 by finding the number that makes 10 when added to 8.

Add and subtract within 20.

- 5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. use strategies such as courting on; making ten (e.g., 8 + 6 8 + 2 + 4 10 + 4 14); decomposing a number leading to a ten (e.g., 13 413 3 1 10 1 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 12. one knows 12 8 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 12 + 1 13).

Work with addition and subtraction equations.

- 7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false?* 6-6, 7-8-1, 5 + 2-2 +5, 4 + 1-5 +2.
- 8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? -11, 5 [] 3, 6 + 6 [].

Number and Operations in Base Ten

Extend the counting sequence.

1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Understand place value.

- 2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
- a. 10 can be thought of as a bundle of ten ones-called a "ten."
- b. the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

c. The numbers 10,20,30,40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

3. Students need not use formal terms for these properties.

16 | K-8 Standards

^{2.} See Glossary. Table 1.

4e: Sample Standard - English Language Development Standards

California English Language Development Standards (Electronic Edition)

Kindergarten Through Grade 12

www.cde.ca.gov

Grade 4

Goal: English learners read, analyze, interpret, and create a variety of literary and information text types. They develop an understanding of how language is a complex, dynamic, and social resource for making meaning, as well as how content is organized in different text types and across disciplines using text structure, language features, and vocabulary depending on purpose and audience. They are aware that different languages and variations of English exist, and they recognize their home languages and cultures as resources to value in their own right and also to draw upon in order to build proficiency in English. English learners contribute actively to class and group discussions, asking questions, responding appropriately, and providing useful feedback. They demonstrate knowledge of content through oral presentations, writing task, collaborative conversations, and multimedia. They develop proficiency in shifting language use based on task, purpose, audience, and text type.

Critical Principles for Developing Language and Cognition in Academic Contexts: While advancing along the continuum of English language development levels, English learners at all level engage in intellectually challenging literacy, disciplinary, and disciplinary literacy tasks. They use language in meaningful and relevant ways appropriate to grade level, content area, topic, purpose, audience, and text type in English language arts mathematics, science, social studies, and the arts. Specifically, they use language to gain and exchange information and ideas in three communicative modes (collaborative, interpretive, and productive), and they apply knowledge of language to academic task via three cross-mode language process (structuring cohesive texts, expanding and enriching ideas and connecting and condensing ideas) sing various linguistic resources.

Part 1	l: Interacting in Meaningful Ways	Corresponding CA CCSS for ELA/Literacy	
A. Co	llaborative		
1.	Exchanging information and ideas with other through oral collaborative discussion on a range of social and academic topics	• SL4.1, 6; L.4.1, 3, 6	
2.	Interacting with others in writing English in various communicative forms (print, communicative technology, and multimedia)	• W.4.6; L4.1, 3, 6	
3.	Offering and supporting opinions and negotiating with other in communicative exchanges	• SL4.1, 6; L4.1, 3, 6	
4.	Adapting language choices to various contexts (based on task, purpose, audience, and text type)	• W.4.4-5; SL4.1, 6: L.4.1, 3, 6	

*The California English Language Development Standards correspond to the California Common Core State Standards for English Language Arts and Literacy in History/Social Science and Technical Subjects (CA CCSS for ELA/Literacy). English learners should have full access to opportunities to learn ELA, mathematics, science, history/social studies, and other content at the same time they are progressing toward full proficiency in English.

4e: Sample Standards - English Language Development Standards

California Department of Education Curriculum & Instruction Testing & Accountability Finance & Grants Data & Statistics

NGSS for California Public School, K-12 Learning Progressions for Elementary (K-5), Middle (6-8) and High School (9-12) Science.

http://www.cde.ca.gov/pd/ca/sc/ngssstandards.asp

K-PS2 Motion and Stability: Forces and Interactions

K-PS2 Motion and Stability: Force and Interactions

Students who demonstrate understand can,

<u>K-PS2-1.</u>

Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. [Clarification Statement: Examples of pushes or pulls could include a string attached to an object being pulled, a person pushing an object, a person stopping a rolling ball, and two objects colliding and pushing on each other.] [Assessment Boundary: Assessment is limited to different relative strengths or different directions, but not at the same time. Assessment does not include non-contact pushes or pulls such as those produced by magnets.]

<u>K-PS2-2.</u>

Analyze data to determine if a design solution works as intended to change the speed or direction of any object with a push or a pull. [Clarification Statement: Examples of problems requiring a solution could include having a marble or other object move a certain distance, follow a particular path, and knock down other objects. Examples of solution could include tools such as a ramp to increase the speed of the object and a structure that would cause an object such as a marble or ball to turn.]

The performance expectations above using the following elements from the NRC document A Framework for K-12 Science Education:

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Planning and Carrying out Investigations	PS2.A: Forces and Motion	Cause and Effect
 Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions. With guidance, plan and conduct an investigation in collaboration with peers. (K-PS2-1) 	 Pushes and pulls can have different strengths and directions. (K-PS2-1), (K- PS2-2) Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it. (K-PS2-1), (K-PS2-2) PS2.B: Types of Interactions When objects touch or collide, they push on one another and can change motion. (K-PS- 1) 	 Simple tests can be designed to gather evidence to support or refute student ideas about cause (K-PS2-1), (K-PS2-2)
Analyzing and Interpreting Data	PS3.C: Relationship Between Energy and	
Analyzing data in K-2 builds on prior experiences	Force	
and progresses to collecting, recording, and	• A bigger push or pull makes things speed up	
sharing observations.	or slow down more quickly (secondary to	

Analyze data from tests of an object or tool to determine if it works as intended. (IK- PS2-2) Connections to Nature of Science Science Investigation Use a Varity of Methods	 K-PS2-1) ETS1.A: Defining Engineering Problems A situation that people want to change or create can be approached as a problem to be solved through engineering. Such a problem may have many acceptable solutions, secondary to K-PS2-2) 		
 Scientist use different ways to study the world. (K-PS2-1) 			
Connections to other DCIs in kindergarten: K.ETS1.A	A (K-PS2-2); K.ETS1.B (K-PS2-2)		
Articulation of DCIs across grade-bands: 2.ETS1.B (K-PS2-2); 3.PS2.A (K.PS2-1) (K-PS2-2); 3.PS2.B (K-PS2-1); 4.PS3.A (K-PS2-1); 4.ETS1.A (K-PS2-2)			
California Common Core State Standards Connections: ELA/Literacy-			
<u>R1.K1</u>			
With prompting and support, ask and answer questions about key details in a text. (K-PS2-2)			
<u>W.K7</u>			
Participate in shared research and writing projects (e.g., explore a number of books aby a favorite author and express opinions about them). (K-PS2-1)			
<u>SL.K.3</u>			
Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-PS2-2)			
Mathematics-			
<u>MP.2</u>			
Reason abstractly and quantitatively. (K-PS2-1)			
<u>K.MD.1-2</u>			
Describe and compare measurable attributes. (K-PS2-1)			

K-PS3 Energy

K-PS3 Energy

Students who demonstrate understanding can:

<u>K-PS3-1.</u>

Make observations to determine the effect of sunlight on Earth's surface. [Clarification Statement: Examples of Earth's surface could include sand, soil, rocks, and water] [Assessment Boundary: Assessment of temperature is limited to relative measures such as warmer/cooler.]

<u>K-PS3-2.</u>

Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.* [Clarification Statement: Examples of structures could include umbrellas, canopies, and tents that minimize the warming effect of the sun]

The performance expectations above were developed using the following elements from the NRC document A Framework for K—12 Science Education:

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Planning and Carrying Out Investigations Planning and carrying out investigations to answer questions or test solutions to problems in K-2 buries on prior experiences and progresses to simple investigations, based on	 PS3.B: Conservation of Energy and Energy Transfer Sunlight warms Earth's surface. (K-PS3- 1) 	 Cause and Effect Events have causes that generate observable pattems. (K-PS33-1)
 fair tests, which provide data to support explanations or design solutions. Make observations (firsthand or from media) to collect data that can be used to make comparisons. (K-PS3-1) 		
Constructing Explanations and Designing Solutions		
 Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions. Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem. (K-PS3-2) 		
Connections to Nature of Science		
 Scientific Investigations Use a Variety of Methods Scientists use different ways to study the world- (K-PS2-1) 		

Connections to other DCIs in kindergarten: K.ETS1.A (K-PS3-2); K.ETS1.B (K-PS3-2)

Articulation of DCIs across grade-bands: 1.PS4.B (K-PS3-1), K-PS3-2; 2.ETS1.B (K-PS3-2), 3.ESS2.D (K-PS3-1); 4.ETS1.A (K-PS3-2)

California common Core State Standards Connections:

ELA/Literacy -

<u>W.K.7</u>

Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K-PS3-1), (K-PS3-2)

Mathematics -

<u>K.MD.2</u>

Directly compare two objects with a measurable attribute in common, t see which object has "more of"/"less of" the attribute, and describe the difference. (K-PS3-1), (K-PS3-2)

Section V:

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