

How to create and maintain a successful learning environment and increase student achievement in California schools.

**Lois Abel, PhD & William Rolland, PhD**

*Based on the California Standards for the Teaching Profession and the Core Propositions of the National Board of Professional Teaching Standards*



## **Mastering All the Teaching Standards**

How to create and maintain a successful learning environment and increase student achievement in California schools.

*Based on the Core Propositions of the National Board of Professional Teaching Standards, the California Standards for the Teaching Profession, and the California Teaching Performance Expectations*

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# Mastering All the Teaching Standards



## Standard One: Engaging and Supporting All Students in Learning





# Let your students inspire you.

As tough as it may be for some politicians to believe, those of us who teach in America's public schools are some of the luckiest educators in the world. Every day we get to come to work and be inspired by an abundance of cultural backgrounds and experiences unmatched in any other setting. It's a feast of knowledge, and our job is to tap into it.

So don't pay any attention to those Chicken Little impersonators who scurry around squawking about how the sky is falling on public schools. News flash: The sky is not falling. It just doesn't look like the same one students


**NBPTS 3.3**

**Teachers place a premium on student engagement.**



**CSTP 1.1 (TPE 1.1)**

**Using knowledge of students to engage them in learning**



**“It is one of the prime glories of the human mind that the same idea or experience is never absorbed in precisely the same way by any two individuals who may be exposed to it.”**

— Norman Cousins



drew in kindergarten pictures during the Eisenhower administration. But that's another story.

In this section, we'll focus on how to be better teachers by becoming better learners.

We'll learn how to find out more about what our students already know, what they like to do when they are not in school, and how they see the world. When we let students teach us about themselves, we become better able, as teachers, to:

- **help them see connections between what they already know and the new material we want to teach them,**
- **design lessons that draw on their interests and capture their attention,**
- **make sure that what we teach and learn in the classroom is relevant to their life experience and cultural understandings, and**
- **support all students to use first and second language skills to achieve learning goals.**

Don't forget that diversity in the classroom is not limited to differing ethnic and cultural backgrounds. Our classroom communities include students of varying abilities and disabilities, as well. We need to support all of them in the learning process. One way to do that is to pay careful attention to what each of them says, asks, and does during lessons, so we can:

- **build on students' comments and questions to extend their understanding, and**
- **make on-the-spot changes in the way we teach in order to support learning for the entire class.**

All of us — teachers and students alike — are immeasurably enriched by the diversity in our classrooms. Let your students inspire you.



## **It's 11 o'clock. Do you know who your students are?**

Remember those TV commercials that gave the time and asked parents, “Do you know where your children are?” On any school day, most parents can answer, “Yes.” But what would you answer if the commercial asked teachers, “Do you know **who** your students are?”

In our diverse classroom communities, getting to know students can present challenges, despite our best intentions. Right off the bat, for instance, we may take one look at an attendance list and have no idea how to pronounce half of the names. Don't sweat it. It's no crime to be a little bit name-challenged, especially when the names come from cultures and countries that are not familiar to us. Here's a couple of handy hints on that one:

- **Let your students tell you how they like to hear their name pronounced, and**
- **Use a cheat sheet (Internet links on next pages).**

**“The essence of our effort to see that every child has a chance must be to assure each an equal opportunity — not to become equal, but to become different — to realize whatever unique potential of body, mind, and spirit he or she possesses.”**

— John Fischer

During the first week of school, you might want to start each day by simply going around the room and having each student say his or her name aloud. In elementary school you may wish to give them a large name card that they can hold up as they stand and say their name. This serves as roll call and it also lets everyone in the class — not just the teacher — see each student and learn how to pronounce his or her name.

At first, you may want to stick with first names only, to keep it simple and promote friendly informality. You may also choose to expand the activity later in the week to include each student saying where they were born and where their parents were born, and perhaps eventually where their grandparents were born.

This type of activity gives students a chance to participate, share equally and to feel a sense of belonging in the diverse classroom community — without making a big deal out of it. After all, it's just roll call, right? It's easy for you and easy for them.

You may also want to use stick-on nametags during the first week or so, to reinforce the learning process and help everyone in the classroom community, including you, to associate names with faces. Students can pair off by drawing nametags and finding each other, then take a couple of minutes to find out something about the other (what they like to eat, their favorite TV show, or something like that). After a few minutes, they can introduce each other to the rest of the class.

Meanwhile, before the first day of school, you may want to check out the **Cal Poly Name Pronunciation Guide** at [www.csupomona.edu/~faculty\\_computing/lab/Pronunciations/Pronunciation/index.html](http://www.csupomona.edu/~faculty_computing/lab/Pronunciations/Pronunciation/index.html). On this interactive web site from California State Polytechnical University at Pomona, you can either explore names by country (helpful hints, phonetic pronunciation guides, and sound samples from native speakers of that language) or you



can type a name into a search engine if you are not sure of the language. The site includes Cambodian, Chinese (Cantonese and Mandarin), Filipino, Indonesian, Japanese, Korean, Thai and Vietnamese names. (Others may be added in the future.)

**Lincoln University** (Canterbury, New Zealand) offers a Malaysian Names Pronunciation Guide on the Internet at <http://www.lincoln.ac.nz/tls/pronun.htm>.

The **Flute Pronunciation Resource** is a useful guide for many European and Japanese names. You can listen to each name pronounced by a native speaker of the language (recorded at the University of Glasgow in Scotland). Languages include French, German, Hungarian, Italian, and Japanese. Check it out on the web at <http://users.uniserve.com/~lwk/ppguide.htm>.

Making the effort to learn your students' names — and to help everyone in the classroom community learn each other's names as well — sets up a strong basic foundation for finding out more about each other's backgrounds and cultures. Something as simple as saying someone's name the way they prefer to pronounce it makes people comfortable because it models active respect. It encourages all students to participate, and shows them they are equal partners in learning. With that attitude, the whole class can have fun and enhance self-esteem while getting to know more about each other.

**“We may have  
come here on  
different ships,  
but we're all  
in the same boat.”**

— Martin Luther King, Jr.



## **Put yourself behind the eight ball.**

Before you can find out more about your students' backgrounds and cultures, you need to make sure you are truly listening with an open mind.

It takes courage to reexamine our own assumptions — about our students, our course content, and what we think we already know — but that's exactly what we need to do in order to respond to and be enriched by the challenges of diverse multicultural classrooms.

There are two parts to the “Cardinal Rule” of diversity for teachers, according to the Derek Bok Center for Teaching and Learning at Harvard University:

- 1. Learn as much about and become as sensitive as you can to racial, ethnic, and cultural groups other than your own.**
- 2. Never make assumptions about an individual based on the racial, ethnic, or cultural groups he or she belongs to. Treat each student first and foremost as an individual. Get to know students individually.**

Here are just a few questions the Center recommends that we ask ourselves, as teachers, in order to examine our own assumptions about ethnic minorities:

- Am I afraid minority students might not be fully competitive with the other students? What is my definition of "fully competitive"?
- Do I expect minority students to need extra help?
- Do I think that there is one correct or appropriate mode of argument or discussion in class? How open am I to multiple modes of discourse?
- If an issue involving race does come up, do I assume the minority student will know most about it and will not mind acting as the class expert concerning it?
- Do I imagine that Latinos or African Americans will express their opinions in non-academic language?
- Do I expect that Asian students will do better than most others?
- Do I respond to a white student's voice as if it had more intellectual weight?
- Do I assume that white students will be insensitive, arrogant, and condescending towards persons of color?
- Do I assume that African Americans or Latinos or other students of color are alike?
- Do I assume that when an African American male disagrees he is angry?
- Do I assume that Asian females are likely to be quiet?

You might want to reflect on these questions without trying to arrive at a definite — or defensive — answer. None of us is a multicultural saint or guru; all of us need to be willing to open up a bit. Just try to relax and let your students tell you whatever they want to about themselves. Don't look for differences or for similarities. Just look for individuals.

**“Assumptions  
are the termites  
of relationships.”**

— Henry Winkler

# **Mastering All the Teaching Standards**



## **Standard Two: Creating & Maintaining Effective Environments for Student Learning**

# First things first: Don't block the box.



In traffic-cop lingo, the “box” is a busy intersection. It's the part of the grid that turns into gridlock if it's not kept clear during rush hour. Most of us are familiar with that scene: Horns blasting, angry drivers shouting, and nobody getting anywhere. It's the polar opposite of the peaceful, enthusiastic, engaging atmosphere we all want in our classrooms.

In this section, we'll learn how to avoid gridlock in our classrooms in order to:

- **keep ideas and communication flowing freely,**
- **encourage participation,**
- **foster cooperation, and**
- **maintain involvement**

— **among all of our students.**

Common sense tells us that the most basic step toward meeting these goals is to start where we sit — or don't sit. You don't have to be a Feng Shui expert to recognize that ideas, communication, and energy can flow more

## NBPTS 3.3

**Teachers place a premium on student engagement.**



## CSTP 2.2 (TPE 2.2)

**Creating physical or virtual learning environments that promote student learning, reflect diversity, and encourage constructive and productive interaction among students**

**“Either you work  
the crowd  
or the crowd  
works you.”**

— Fred Jones,  
*Tools for Teaching*

freely when we, as teachers, can move more freely among our students.

Accessible seating arrangements turn the entire classroom — not just the board up front — into a stage for teaching and learning. Moving around the whole room puts teachers in close proximity to a wide variety of students throughout the period or day, so we don't fall into the trap of calling on the same hand-waving students in the front row again and again. A teacher on the feet is worth two in the seat!

And, of course, establishing a presence throughout the room helps maintain order by eliminating the conventional perception that a kid throwing spitballs in the back row is, by design, invisible to the teacher.

Research underscores the importance of teachers actively moving around the classroom. Experienced educators say we need to get away from the traditional classroom grid in which students' desks are lined up in tidy rows. That scheme makes life easy for custodians but tough for teachers, notes Fred Jones, author of *Tools for Teaching*. The desks form a block of student territory, cut off from the teacher at the front of the class. Narrow aisles between the rows discourage teachers from penetrating the student “zone,” which makes it difficult to respond to students who aren't easy to see or easy to reach.

So what is the best way to arrange a classroom?

There is no one best way. Each of us has many variables to consider. What size is your room, for example? What shape is it? Is it narrow, oblong, square, round? Are there fire and safety codes you must meet?

What kind of furniture do you have? Does each student have an individual desk or do you use shared desks or long tables? Is there a large teacher's desk? Do you even want one?

How about equipment? Computers? Bookshelves?  
Supply cabinets?

What grade level do you teach? Do any of your students  
have special needs? Behavior problems?

Each of us must create a room arrangement that works  
best for our own situation. You may even find that you  
prefer a flexible layout that can be changed on certain  
days or for certain activities. No matter what design you  
choose, however, several basic factors must be  
considered in organizing a flourishing classroom:

- **Movement:** Don't block the box. Keep high-traffic zones clear so both you and your students can easily get supplies from storage areas, and so you can quickly and easily get to any student at any time.
- **Sightline:** We need to see all of our students — and they need to see us. Arrange desks and work spaces so that every student can easily see on the chalkboard to show-and-tell in the center of the room. This gives students equal visual access to learning and it gives you a clear sightline for monitoring.
- **Focus:** Creativity and color are great, as long as there is more method than madness, but too much clutter on the walls can turn decoration into distraction. Likewise, desks facing the windows can make a classroom feel like a movie theatre — lively schoolyard action is bound to draw attention away from lessons.



**Think:**

- floor space
- wall space
- work space.

**“Those of us  
who make  
motion pictures  
are also teachers:  
teachers with  
very loud voices.  
But we will  
never match  
the power  
of the teacher  
who is able  
to whisper  
in a student's ear.”**

— George Lucas,  
Oscar-winning director

Clear sightlines, free movement, and a learning area free of clutter and distractions help provide a physical environment that meets the goals of this lesson:

- keeping ideas and communication flowing freely,
- encouraging participation,
- fostering cooperation, and
- maintaining involvement

— among all of our students.

## **What you see is what you get.**

When you set up your physical environment, you set up the attitude that will prevail inside of it. Seating layouts shape territory, authority, ownership, and interaction. Educators such as Jon Saphier and Robert Gower (*The Skillful Teacher*) have established these basic guidelines for effective teaching/learning spaces:

- Desks lined up in rows discourage interaction with anyone other than immediate neighbors, while **semi-circles and clusters of desks** invite communication and participation.
- **Community workspaces** defined by groups of desks or tables pushed together foster cooperation. If you have more than one community workspace, keep them separate from each other to avoid distraction and interference.



- **Special quiet areas** respect students' need to pursue individual learning activities. They should be set apart from busy community workspaces.
- Supply closets hidden in the back of the room may as well be posted with "Keep Out" signs, while **visible supply stations** promote free access and creative use of learning materials.
- **Wide, clear paths** invite both teachers and students to use the entire classroom for teaching and learning.
- **If it doesn't belong on a student's desk, it doesn't belong on yours, either.** Don't put coffee cups, snacks, cell phones, and other personal items on your desk unless you want your students to start bringing their stash to class, too.

## Go with the flow.

Many experiences educators have emphasized the value of flexibility in classroom organization. Flexible seating arrangements allow both teachers and students to be more responsive. Sometimes it's easier to listen and learn in a relaxed open space than sitting in a desk, for example. Many teachers like to rearrange their rooms for certain activities or on certain days. New-Teacher.com, a web site developed by Roger Spence, offers these suggestions about how to be flexible without going too far:



- **Don't be afraid to change your arrangement based on your instructional objectives.** When you're doing poetry, for instance, you might want to turn the desks toward the window to become inspired by nature; when you're doing small-group work, you may move the desks into clusters of 4-5 students; for full-class instruction, you might put desks in a chevron shape.
- **Don't change it too often.** Let the students develop some ownership of their classroom space; allow time to adjust and thrive between changes in classroom arrangement.
- **Maintain the same seating arrangement during assessment as you had during the unit itself --** many students make associations between where they were when they learned something and where they are when they must recall it.
- **Try the teacher's desk in back** where it promotes a student-centered atmosphere. That also gives you space to work while keeping an eye on students.




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**I am a teacher.  
 A teacher is someone who leads.  
 There is no magic here.  
 I do not walk on water,  
 I do not part the sea.  
 I just love children.**

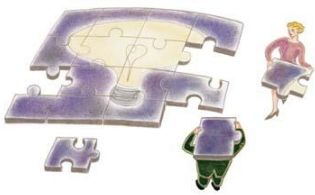
— Marva Collins

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# Mastering All the Teaching Standards



## Standard Three: Understanding and Organizing Subject Matter for Student Learning



### NBPTS 1.2

Teachers have an understanding of how students develop and learn

### CSTP 3.1 (TPE 3.1)

Demonstrating knowledge of subject matter academic content and curriculum frameworks



## You can't teach what you don't know.

For high school science teachers, this concept is easy to get. They have to have a sufficient level of expertise in their discipline to help students grasp increasingly complex key concepts, apply the scientific method, develop hypotheses and methods for testing them, and communicate the results. Keeping up with new theories and advances is crucial.

So far, so good.

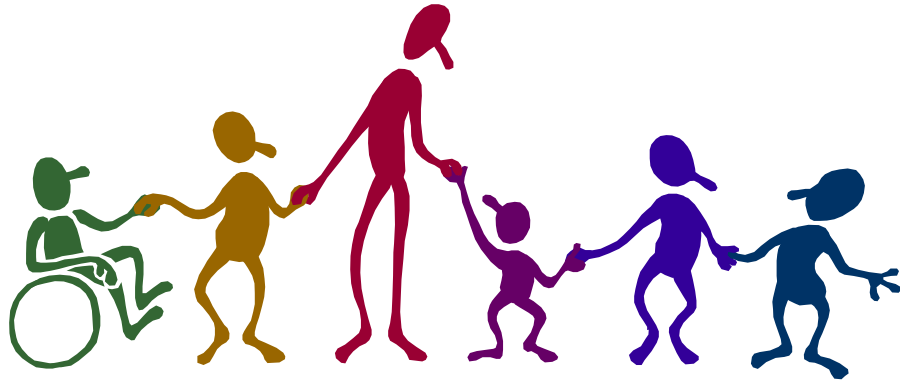
But what about the elementary teacher who must demonstrate and clarify content in eight or more subjects? How does a first-grade teacher help students understand history when they barely grasp what “yesterday” means?

The answer is that all teachers must stay current with the subject matter they teach, relative to the developmental levels of their students. A high school teacher must read journals, take seminars, or do whatever is necessary to successfully interpret complex subject matter — keeping in mind students’ diverse needs and perspectives. An elementary teacher needs to stay current on the key concepts of a variety of subjects, but the primary focus is on how to introduce it and engage students in a developmentally appropriate way.

Between first and eighth grade, individuals grow and develop so fast it’s amazing. Yet students who are able to grasp and build on abstract ideas in one subject may not be as quick to understand another.

Anyone who thinks an elementary teacher’s job is simple has no idea how many factors must be considered for every student and every subject on a daily basis. At every grade level, our goals are to:

- **identify and understand the key concepts and underlying themes and relationships in the subject areas to be taught;**
- **ensure that knowledge of the subject matter incorporates different perspectives;**
- **continue to keep subject matter current;**
- **ensure that our subject matter knowledge is sufficient to support student learning; and**
- **build understanding of students’ cognitive and linguistic development.**



## **What and how are students prepared to learn?**

Before we get into subject matter, let's start with the bottom line: Who are your students, and what are they ready to learn? There's a big difference between a 6-year-old first-grader who always wants to be the center of attention yet cries at the drop of a hat, and a 7-year-old second-grader who doesn't like being singled out for any reason but can reason through problems fairly well. If you teach first or second grade, you already know that very well.

The American School Counselor Association (ASCA) developed a guide to help parents support their kids as they progress through the many stages of growth — and growing pains — from first grade through high school. This guide, which lists developmental attributes, basic skills, and how to help, is so useful for both teachers and parents that it's reprinted on many web sites, including Teacher Vision ([www.teachervision.com](http://www.teachervision.com)).

As you read the information listed, be sure to pay attention to the grade levels before and after the one you teach. Good teachers know where their students came from, where they are now, and where they need to be next.

## First grade

### Attributes

The average 6-year-old is extremely egocentric and wants to be the center of attention. She or he:

- **wants to be the “best” and “first.”**
- **has boundless energy.**
- **may be oppositional, silly, brash, and critical.**
- **cries easily; shows a variety of tension-releasing behavior.**
- **is attached to the teacher.**
- **has difficulty being flexible.**
- **often considers fantasy real.**

### Basic skills

By the end of the year most students will be able to:

- **read at least 100 sight words.**
- **locate the main idea and details in stories.**
- **recall the sequence of events in oral and written stories.**
- **write words legibly in manuscript form.**
- **capitalize the first word in a sentence and use the period and question mark at the end of a sentence.**
- **recognize the singular and plural forms of nouns.**
- **count to 100 by one's, two's, five's, and ten's.**
- **write the numerals to 100.**
- **add and subtract numbers up to and from 10.**

### Support strategies

In first grade teachers are helping students grow socially as well as academically. At 6 years old, children are learning to understand themselves. Encourage them as they:

- **develop a positive, realistic self-concept.**
- **learn to respect themselves.**

- begin to understand their own uniqueness.
- gain awareness of their feelings.
- learn to express feelings.
- learn how to participate in groups.
- begin to learn from their mistakes.

(Sample for secondary follows:)

### ▶ Late Adolescence 17-19 years old

#### General attributes

- Firmer identity
- Ability to delay gratification
- Ability to think ideas through
- Ability to express ideas in words
- More developed sense of humor
- Stable interests
- Greater emotional stability
- Ability to make independent decisions
- Ability to compromise
- Pride in one's work
- Self-reliance
- Greater concern for others

#### Attributes - Career Interests

- More defined work habits
- Higher level of concern for the future
- Thoughts about one's role in life

#### Attributes - Sexuality

- Concerned with serious relationships
- Clear sexual identity
- Capacities for love



## Attributes - Ethics and Self-Direction

- Capable of useful insight
- Stress on personal dignity and self-esteem
- Ability to set goals and follow through
- Acceptance of social institutions and cultural traditions
- Self-regulation of self esteem

## Support strategies

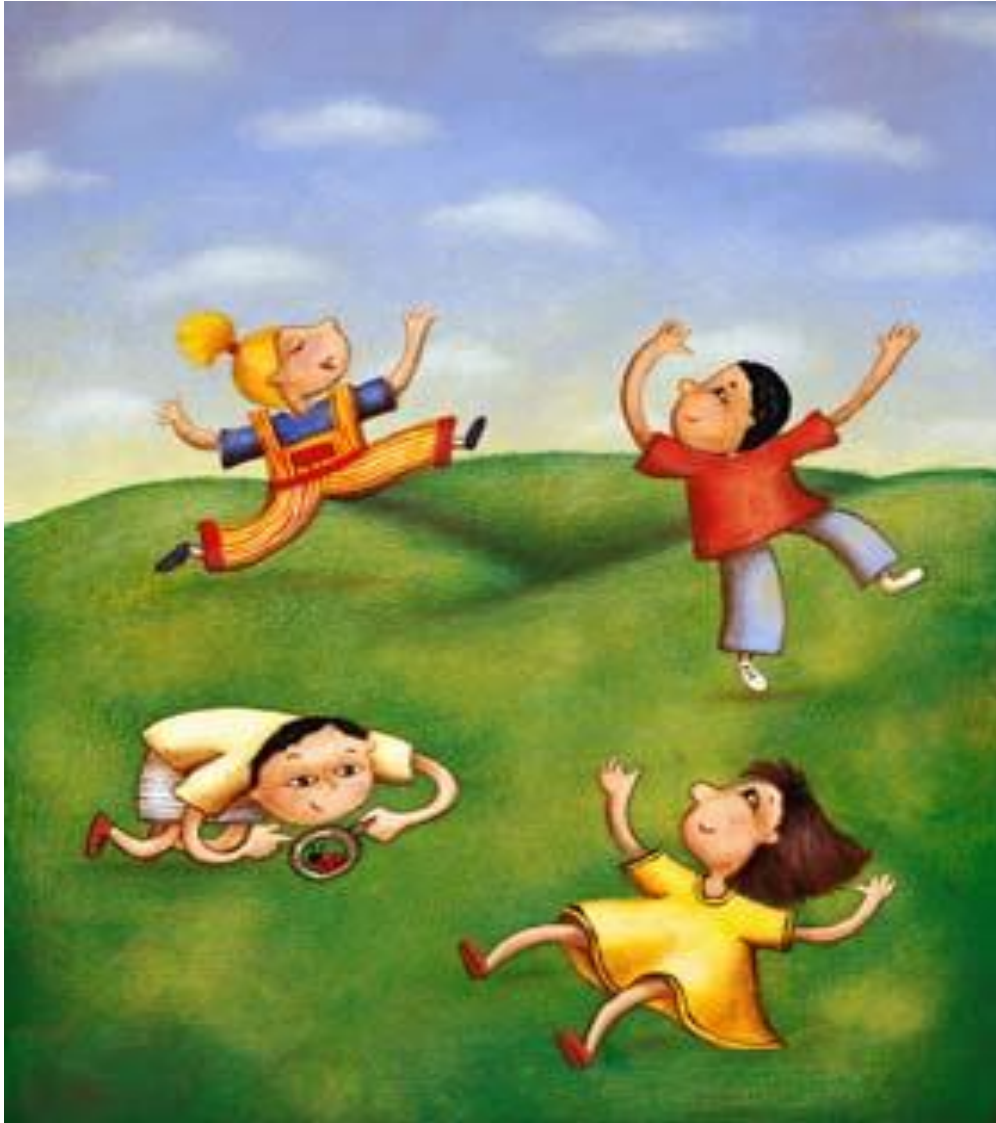
In high school young people are developing emotionally, intellectually, and physically. Parents can help in the following ways:

- **Create a quiet space for homework to be completed. A place free from disruption and fully stocked with supplies (pencils, pens, paper, stapler, tape, calculator, etc.) is ideal.**
- **Communicate with students about their homework, and what large projects and tests are upcoming.**
- **Keep a family routine concerning dinner, homework, and TV.**
- **Remember that intrinsic motivation leads to greater creativity. Allow students to try a variety of activities in order to find their true interests.**
- **Encourage students to keep trying when faced with a challenge. Remind students that parents and teachers are available to provide extra help.**
- **Encourage children to read if they want to improve their scores on standardized tests. The best way to improve reading comprehension and vocabulary is to read a lot.**

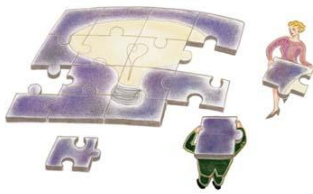
- **Help children set realistic goals and work toward them systematically. Also, no matter what the goal (making a sports team, improving academic grades, or learning a new skill) remind children that the journey is as important as attaining the goal.**

**Allow adolescents some freedom yet, stay involved in their lives. We all learn through experience and sometimes failure is the best teacher.**

# Mastering All the Teaching Standards



## Standard Four: Planning Instruction and Designing Learning Experiences For All Students



#### **NBPTS 1.4**

**Teachers' mission extends beyond developing the cognitive capacity of their students**

**CSTP 4.1 (TPE 4.1)  
Using knowledge of students' academic readiness, language proficiency, cultural background, and individual development to plan instruction**



## **Great minds don't all think (or learn) alike.**

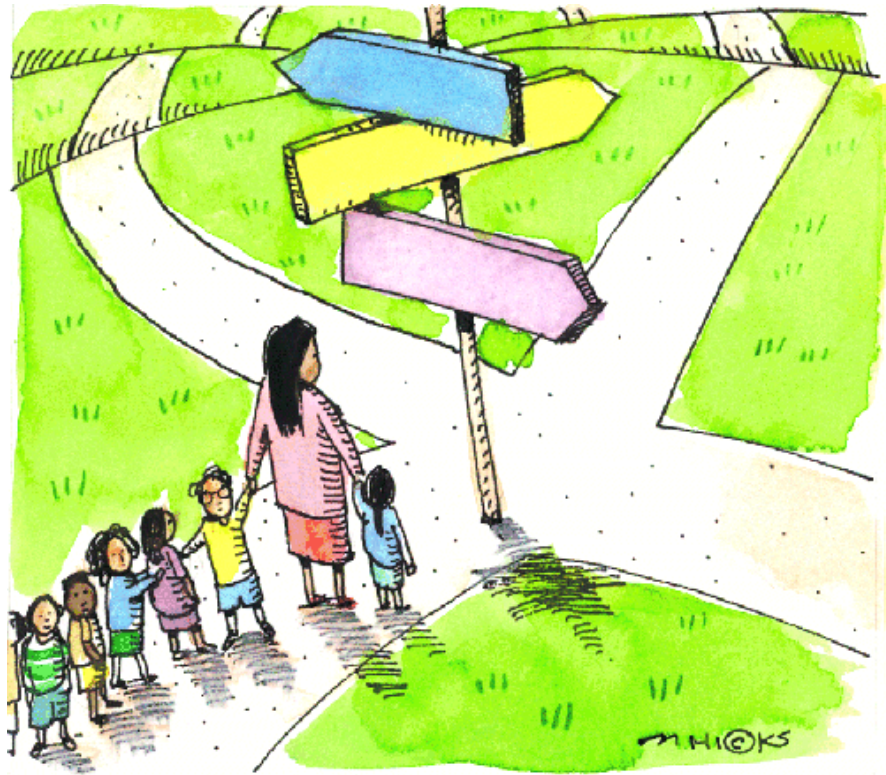
One kid may carry perfectly sharpened No. 2 pencils to school in a tidy little case, while another might figure out how to turn a pencil into a giant pogo stick and ride it right into the classroom. One kid may already know how to play a Mozart concerto, while another may be a skateboard champion. One may be hyper-organized, the other a free spirit. What matters is that all of these students can learn from each other, just as we teachers can learn from — and teach — all of them.

As we discussed in Standard One, each student's prior knowledge, interests, background, and developmental needs are springboards for what and how they learn in

school. So before we even begin to plan lessons, we need to find out what our students already know, what they like to do when they are not in school, and how they see the world. We need to assess where they stand developmentally — what they are ready to learn and where they need to go next. Finally, we need to remember that diversity is not merely a matter of differing ethnic and cultural backgrounds; our classroom communities include students of varying abilities and disabilities as well.

With that in mind, we can plan instruction and design learning experiences that will enable and empower students to **learn appropriate content** and **move on to the next developmental level**. Our goals are to:

- **incorporate students' knowledge and experience in curriculum and instruction planning;**
- **use knowledge about students' lives and their families and communities to inform planning of curriculum and instruction;**
- **recognize and incorporate student diversity as an integral part of planning;**
- **plan lessons and units that promote access to academic content for all students;**
- **design lessons that promote subject matter knowledge and language development for second-language learners;**
- **use what we know about cognitive and linguistic development to plan instruction that supports student learning;**
- **use what we know about physical, social, and emotional development to plan instruction and make appropriate adaptations to meet students' unique needs; and**
- **design lessons that challenge students at their own developmental levels.**



## Teacher, are we there yet?

Before you embark on lesson planning, ask yourself these three basic questions:

1. **Where are your students going?**
2. **How are they going to get there?**
3. **How will you know when they have arrived?**

Then back up for a minute and ask: **Where are we now?**

It seems like a simple enough question. But how do you know where each student in your class is actually beginning the year's — or a particular lesson's — learning journey? One good and easy way to find out is to use the K-W-L strategy developed by Donna Ogle, president of the International Reading Association and author of *Coming Together As Readers*.

| K-W-L STRATEGY                |   |   |
|-------------------------------|---|---|
| <b>K</b> - What I <b>know</b> | <b>W</b> - What I <b>want</b> to find out | <b>L</b> - What I <b>learned</b> and still need to <b>learn</b> |

Ogle's formative assessment strategy is like a good Swiss Army knife — it may be one of the handiest multipurpose survival tools you'll ever possess as a teacher. Before you plan a lesson or engage in a learning activity, use it for pre-assessment. During the activity, use it as a learning strategy. After the activity, use it again to assess what has been learned. Ready to move on? Use it to inform what you plan next.

Here's how it works.

Let's say you want to plan a geography lesson in which students explore the New York subway system as a way of understanding the people and places of New York City. A **preliminary discussion**, using a **large K-W-L chart** as a graphic organizer, allows both you and your students to discover what they already know about transportation in general and New York's subway system in specific. Then, with your guidance, students can brainstorm and articulate what they want to find out.

During the preliminary discussion, you also may introduce some key vocabulary and concepts that will be necessary to participate fully in the lesson. You might, for example, display a subway map to introduce the different color-coded train "lines" that traverse New York City, and you might preview the concept of a "transfer" from one train to another.

The K-W-L brainstorming session will elicit a wealth of questions from the class. Use them to help you formulate and introduce the central question or problem to be resolved in the lesson.



**Key factors for planning lessons and learning activities that support student learning:**

- **content knowledge,**
- **developmental levels,**
- **cultural and personal backgrounds.**

**These considerations should be addressed reflectively — before, during, and after the lesson or activity.**

**“The object of teaching a child is to enable him to get along without a teacher.”**

— Elbert Hubbard

Once you've formulated and introduced the central question or problem, you can model or outline a plan of action. Let's say the problem is how to get from Grand Central Station to three separate places in Manhattan. Using the K-W-L strategy, you might explore the subway map and show students how to use it for a similar problem.

During the actual lesson/activity, students complete the task as modeled, usually in small groups. Afterward, they share and discuss their results, then reflect on what they learned and how they learned it, using the K-W-L chart to document “What I learned and still need to learn.”

At that point, you can assess what you need to re-teach, what you need to adjust, and where to go next.

This type of lesson-planning is **constructivism** in action.

## **How does constructivism apply to lesson planning?**

Constructivism, as you probably know, is the understanding that knowledge is constructed within the mind of the learner. The School Improvement in Maryland web site ([www.mdk12.org](http://www.mdk12.org)) points out that constructivist classrooms require students to be actively engaged in their own learning: “It contrasts with the concept of the learner as a passive receiver of knowledge. In a constructivist classroom students are actively involved in the learning process and given the opportunity to construct knowledge based on their own background. Then, through reflection, they integrate that knowledge so that it is part of a deeper understanding.”



That means every phase of instruction, including planning lessons and learning activities, should involve student participation as much as possible.

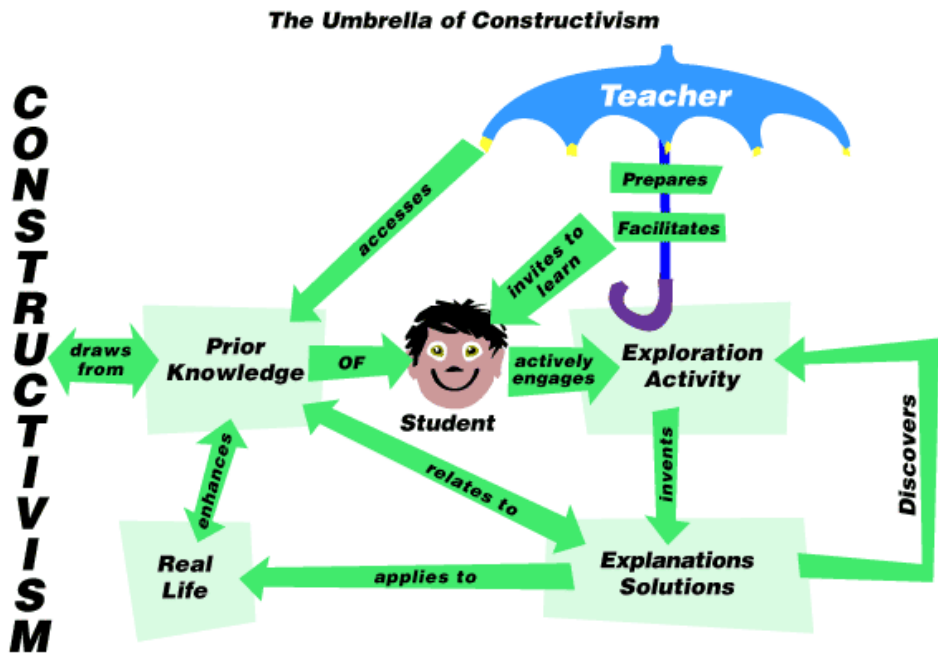
This idea draws greatly on the work of Swiss educator Jean Piaget, who, as we discussed in Standard One, believed that children understand only what they discover or invent themselves. We'll get back to Piaget and his ideas about cognitive development in the next section.

Meanwhile, on the following pages you'll see several "constructivism maps" provided by School Improvement in Maryland — beginning with "The Umbrella of Constructivism" and concluding with "The Learning Cycle." As you explore the maps, reflect on the questions beneath them. And as you reflect on each specific map, consider these three general questions:

- 1. Where and how, specifically, does the lesson-planning process fit into this scheme?**
- 2. Do I use any or all of these processes for planning lessons? If so, how?**
- 3. How might I use these maps to help me plan instruction and design learning for all of my students?**

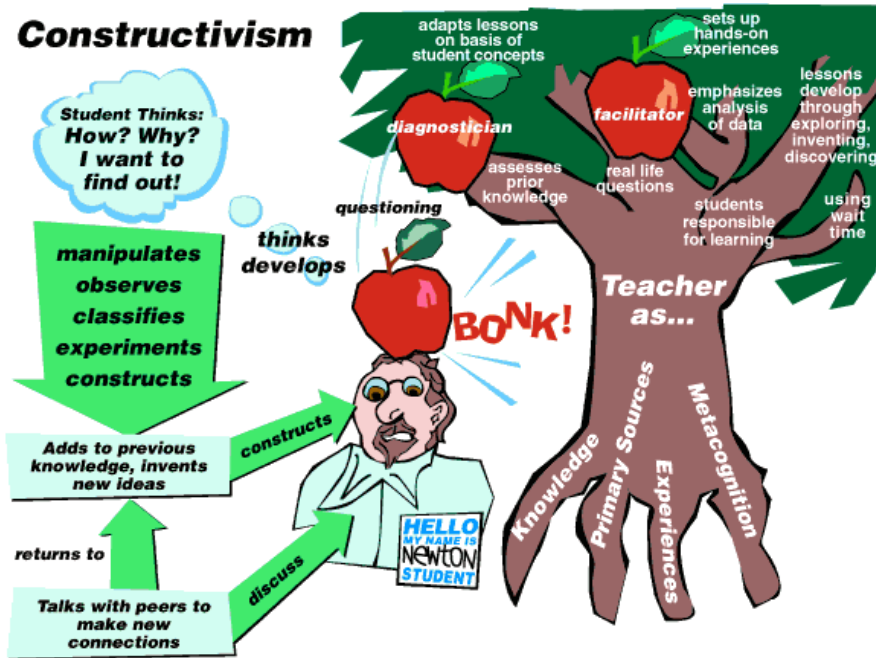
**“Education is a succession of eye-openers, each involving the repudiation of some previously held belief.”**

— George Bernard Shaw



Notice that the umbrella over this entire process is the teacher. That's because children need our guidance in order to discover, invent, and reinvent their own knowledge and growth. According to this map, our job is to prepare and facilitate. What does that mean to you? How does it apply to your own classroom experience?

# Constructivism



In this map, the teacher is the tree from which the apple of “questioning” falls to “bonk” the student on the head, allowing him to have the direct personal experience of gravity. The teacher, as facilitator, has set up a hands-on learning experience. How does the teacher, as diagnostician, prepare and facilitate that experience? How does that relate to the way that you plan and set up learning experiences in your own classroom?

# Mastering All the Teaching Standards



## Standard Five: Assessing Student Learning



## Every learning journey begins with a goal.

Before we even start talking about assessing student learning, let's be frank about the bottom line: Teachers are mandated to meet district, state, and national standards, yet our diverse classrooms are filled with kids who learn in different ways, at different rates, and often in different languages.

**How can we set goals that address generalized standards while supporting the learning needs of each individual student?**



**NBPTS 3.5**

**Teachers are mindful of their principal objectives**

**NBPTS 3.4**

**Teachers regularly assess student progress**

**CSTP 5.4 (TPE 5.1 & 5.5)**

**Using assessment data to establish learning goals and to plan, differentiate, and modify instruction**

**“The great thing in this world is not so much where we are, but in what direction we are moving.”**

— Oliver Wendell Holmes

That's the big question that overwhelms many new teachers. It's not easy. It's sometimes frustrating. But it can be done.

When you feel strangled by standards, try to look beyond the stilted academic language to the authentic underlying intention. For a moment, don't even think about numbers or test scores or accountability.

Just ask yourself:

### **What is the true purpose of the learning activity?**

Once you understand that true purpose, you can begin to think about how your individual students might be able to move in the direction of fulfilling it.

That's how you balance general standards with individual needs. And that's how you set appropriate (realistic yet challenging) goals.

You can't rush the goal-setting process. If you don't take time to understand the true purpose of each standard, you won't be able to adapt it to the diverse needs of your students. And if you don't take time to find out the many different ways individual students learn, you won't be able to set appropriate goals for them. Remember:

- If goals are unrealistic, students will be discouraged.
- If goals are not clear to students, they won't know where they are headed.
- If goals are not clear to you, you won't know where you are headed — nor will you be able to communicate expectations to parents.
- If goals are not well thought out, you won't know how to modify curriculum or revise goals when necessary.

Establishing, communicating, and working toward individual learning goals are fundamental to effective teaching. It may seem like way too much work to go through that painstaking process — evaluating academic standards, getting to know the needs of each student, interacting with the parents, and sometimes modifying content or revising goals for individual students — but the payoff is huge. Students are more engaged in learning and parents often become partners in the process as well. One of the biggest benefits for you, on a day-to-day basis, is that you end up with a more productive and peaceful classroom. (Did we mention how much that can cut down on stress?)

Our goals, eventually, are to:

- **use subject matter standards from district, state, and other sources to guide how we establish learning goals for each student,**
- **involve all students and families in establishing goals for learning,**
- **review and revise learning goals with every student over time,**
- **ensure that student learning goals reflect the key subject matter concepts, skills, and applications,**
- **ensure that goals for learning are appropriate to students' development, language acquisition, or other special needs,**
- **ensure that our grading system reflects our goals for student learning, and**
- **work with other educators to establish learning goals and assessment tools that promote student learning.**

Don't worry, we'll take it step by step. After all, we're about to become experts on setting realistic goals — especially for ourselves.

**“Your goals are the road maps that guide you and show you what is possible for your life.”**

— Les Brown



Goals for a New Zealand elementary class. ([www.leading-learning.co.nz](http://www.leading-learning.co.nz))

## Is it true that goals are just dreams with deadlines?

“Dreams with deadlines.” That’s a seductive buzz phrase for a motivational seminar, but it needs a little refining for a K-12 classroom. Every classroom community needs two kinds of goals: a list of what they would like to get from school during the term (which can include both whole-class and individual “dreams”); and realistic, concrete short-term goals that will help each of them fulfill specific requirements of content standards.

Obviously, teachers can’t expect students to understand content standards — that’s our job, not theirs. But we can help them set goals for themselves so they can work toward meeting those standards. Take a look at the illustration on this page, for example. A New Zealand elementary teacher worked with students to set goals for the term.



Notice that the math goals and activities are straightforward: to investigate patterning, to be able to repeat a letter pattern, and to explore 2X and 5X tables. But goals for learning about the Maori (indigenous people of New Zealand) involved activities that may have been selected by the class, with guidance from the teacher: to learn five songs, to be able to count to 20 in Maori, and to greet people using the correct pronunciation of “Kia Ora” (the Maori equivalent of Hawaii’s “aloha”).

In both cases, it appears that the true purpose of the content standard is foremost, yet there is room for the class to participate in choosing some of the learning activities they will use to try to meet the standard. This is a very good example of setting and communicating appropriate goals for student learning.

There are two ways to communicate goals to students:

- **direct** (goals are set in advance, based on the true purpose of the learning activity as required by the content standard, and the teacher makes sure they are clear to the class before engaging in the activity), and
- **indirect** (students participate in the learning activity and then reflect afterward on what they have learned and how they learned it).

It's crucial to communicate goals to both students and parents. But we'll get more into that later. For now, let's just focus on the goal-setting process. We've already established that **the first step in setting learning goals is to be very clear about the content standards ourselves, then to design goals that represent the true purpose of the learning activity.**

**“Your goals should be challenging enough to make you stretch, but not so far that you break.”**

— Rick Hansen

One of the biggest pitfalls for many educators — not just new teachers — is setting goals that confuse the end with the means, according to the Center for Applied Special Technology (CAST), a not-for-profit educational group that uses technology to expand learning for all students, especially those with special needs.

**We teachers need to make sure that we don't inadvertently tie goals to a method of achieving them.**

Why? David Rose and Anne Meyer, authors of *Teaching Every Student in the Digital Age*, offer this cautionary tale on the CAST's Teaching Every Student web site ([www.cast.org/teachingeverystudent](http://www.cast.org/teachingeverystudent)):

“Imagine a woodworking instructor is setting goals and performance criteria for a class of 30 students. One of the first goals he sets is ‘Students will master cutting wood with a handsaw.’ The performance criterion is for all students to use a handsaw to cut along a straight line drawn on a board. What is the likelihood that every one of the instructor's students will be able to achieve this goal?”

The odds are slim, Rose and Meyer warn: “The wording of the goal confounds its objective with the means for attaining it,” they point out, “and the single performance criterion guarantees that while some students will be under-challenged, others will be over-challenged and have almost no chance of success. It's clear this goal could not be attained by a student who would have difficulty seeing a line drawn on a board, or by a student who lacks the physical ability to use a handsaw or to cut along a straight line. The goal would also be problematic for any student who fears being injured with sharp tools. Further, because students differ in coordination, strength, and physical ability, the single performance will be too high for some and too low for others.”

This is where the “dream” part of our goals as teachers either meets or collides with the “realistic” part. According to Mike Schmoker and Robert J. Marzano, authors of *Realizing the Promise of Standards-Based Education*, well-designed content standards can help teachers “realize the dream of learning for all.” But what happens to the dream when it trickles down to where instruction actually takes place, in the classroom?

Schmoker and Marzano believe the dream often drowns in chaos. They recall sitting with a district curriculum coordinator, poring through a dense curriculum notebook of the district’s grade-by-grade learner outcomes. When they asked the coordinator what influence this weighty document had on instruction, she answered frankly, “Probably none.”

Many other educators share that view. Heidi Hayes Jacobs, author of *Mapping the Big Picture: Integrating Curriculum & Assessment K-12*, says that most curriculum guides are “well-intended fictions.”

But it doesn’t have to be that way. You can “realize the dream of learning for all.” We can’t repeat this enough: If you set realistic goals based on the true purpose of the learning activity, you can make it possible for all students to work toward meeting curriculum standards.

What is a realistic goal? Does being realistic mean that we have to lower expectations for some students? Or is there a way to reframe a goal so that all students are equally challenged even though they have different learning needs?

To reflect on that, let’s go back to our woodworking instructor. If he had revised his goal from “master cutting wood with a handsaw” to simply “cut wood” or “learn basic carpentry,” the outcomes would better represent the true purpose of his learning activity. As Rose and Meyer stress: “All students could work toward these

**“One day Alice came to a fork in the road and saw a Cheshire cat in a tree. ‘Which road do I take?’ she asked. ‘Where do you want to go?’ was his response. ‘I don’t know,’ Alice answered. ‘Then,’ said the cat, ‘it doesn’t matter.’ ”**

— Lewis Carroll,  
*Alice in Wonderland*

broader goals, using whatever tools suit them best, and all could strive toward levels of competency that represent individual progress.”

Of course, CAST is pitching for increased use of flexible media, such as computer-based technology, rather than reliance on traditional fixed media, such as books and pencils and paper. But the point is the same whether you have one lone computer or an entire lab at your disposal. The idea is simply to give students more tools for learning.

Let’s say your learning activity involves research. Which of the following goals better challenges — and makes it possible for — all students to succeed?

1. Collect information from a variety of books.
2. Collect information from a variety of sources.

If the true purpose of the activity is to learn to collect and synthesize information, the second goal clearly is a better choice because it doesn’t limit students’ options to written text alone. It challenges all students to conduct research creatively, from a rich variety of sources. That raises the bar for all students — including slow readers, who can gather information from digital text with reading support, videos, oral interviews, image-rich text, and other scaffolds. Everybody learns more.

It’s amazing that such a seemingly small shift in thinking can open up such vastly improved pathways for learning.

### **Think about it.**

Before you got to this point in this section, did you think that being “realistic” would mean lowering expectations, rather than raising them?



### **The ABC’s of goal setting:**

- A. Know and understand the content standard.**
- B. Know and understand the true purpose of the learning activity.**
- C. Differentiate goals from methods.**

**For more information contact:**



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