



A multistate review of professional teaching standards















# A multistate review of professional teaching standards

**July 2009** 

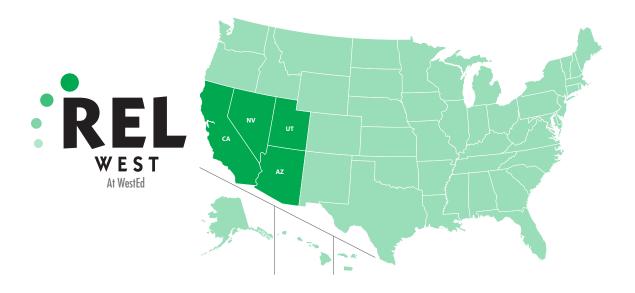
**Prepared by** 

Melissa Eiler White WestEd

Reino Makkonen WestEd

Kari Becker Stewart WestEd





**Issues & Answers** is an ongoing series of reports from short-term Fast Response Projects conducted by the regional educational laboratories on current education issues of importance at local, state, and regional levels. Fast Response Project topics change to reflect new issues, as identified through lab outreach and requests for assistance from policymakers and educators at state and local levels and from communities, businesses, parents, families, and youth. All Issues & Answers reports meet Institute of Education Sciences standards for scientifically valid research.

### July 2009

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-06-CO-0014 by Regional Educational Laboratory West administered by WestEd. The content of the publication does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

This report is in the public domain. While permission to reprint this publication is not necessary, it should be cited as:

White, M.E., Makkonen, R., and Stewart, K.B. (2009). *A multistate review of professional teaching standards* (Issues & Answers Report, REL 2009–No. 075). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from http://ies.ed.gov/ncee/edlabs.

This report is available on the regional educational laboratory web site at http://ies.ed.gov/ncee/edlabs.

**Summary** REL 2009–No. 075

# A multistate review of professional teaching standards

This review of teaching standards in six states—California, Florida, Illinois, North Carolina, Ohio, and Texas—focuses on the structure, target audience, and selected content of the standards to inform California's revision of its teaching standards. The report was developed at the request of key education agencies in California.

California is revising its state teaching standards. This report, developed at the request of key education agencies in California, provides an overview of the teaching standards in five states—Florida, Illinois, North Carolina, Ohio, and Texas—purposefully selected to inform California's revision process. California's current teaching standards are also reviewed as a point of comparison. The review focuses on the structure and target audience of the states' teaching standards, as well as on selected content. Three questions guided the research:

- What is the target group of teachers for the teaching standards?
- What is the structure of the teaching standards?
- To what extent do the state teaching standards address instruction of English language learner students, instruction of students with disabilities, use of education

technology, and instruction in the context of accountability and student learning standards?

Key findings of the review, which entailed examining each state's teaching standards and supporting documents, include the following:

- California, Florida, Illinois, North
   Carolina, and Ohio have developed their
   teaching standards to cover all teachers,
   from beginning to experienced. Texas has
   developed its teaching standards expressly
   for beginning teachers.
- California, Illinois, and North Carolina each has one set of teaching standards that applies to all teachers. Teaching standards in Florida are differentiated by teachers' career levels and in Ohio by teachers' performance levels. Texas has 50 different sets of teaching standards, generally organized by content area and grade span. However, one of them, the pedagogy and professional responsibilities standards (EC-12), applies to all beginning teachers from early childhood education through grade 12. This set is similar to the other state teaching standards reviewed for this study in content and purpose and thus is the set on which this report focuses when discussing Texas.

- The professional teaching standards documents reviewed for this report vary in length between 4 pages (North Carolina) and 32 pages (Florida), and the number of teaching standards in each document ranges from 4 (Texas) to 12 (Florida).
- The states' teaching standards address instruction of English language learner students through the following topics: recognition or support of diversity (5 states), differentiation of instruction for English language learner students (5 states), knowledge of related theory or strategies (4 states), communication with students and families (3 states), assessment of students' language status and development (2 states), and selection of related materials or curricula (1 state).
- Instruction of students with disabilities is addressed through several topics in the state teaching standards reviewed for this report: differentiated instruction (5 states), inclusion (4 states), collaboration with Individualized Education Program teams and other stakeholders (4 states), students' rights (3 states), patterns or styles of learning (2 states), identification of students with disabilities (2 states), teachers' attitudes and self-assessment (1 state), and assessment of students with disabilities (1 state).
- The use of technology in the classroom was addressed through the following topics: effective integration into instruction (6 states), conventions for accessing or managing information (4 states), use of technology to assess students (3 states), identification of technology and evaluation

- of its instructional value (3 states), teachers' demonstration of competence with or interest in technology (3 states), use of assistive technology for students with disabilities (2 states), and use of technology for collaboration or communication (2 states).
- The teaching standards considered accountability and student learning standards through four topics: teachers' knowledge and understanding of state learning standards (4 states), use of learning standards to plan instruction (3 states), delivery of standards-based instruction (3 states), and assessment of students' progress toward meeting the state learning standards (3 states).

Collectively, the six sets of state teaching standards reviewed offer various options for broad consideration, such as structure and target groups of teachers. They also offer specific details on issues and topics emphasized and on language choices. Individual state profiles, available online at www.wested.org, include extensive excerpts from the teaching standards documents. The excerpts are generally organized according to the issues and topics outlined in this overview, as a reference.

**July 2009** 

8

11

TABLE OF CONTENTS
Why this study? 1
Cross-state overview 2 What is the target group of teachers for the teaching standards? 4 What is the structure of the teaching standards? 5
To what extent do the state teaching standards address the identified issues of concern?  Meeting the needs of special populations 6  Using education technology 9  Considering accountability and student learning standards 10
Conclusion 11
Notes 13
References 14
Box
1 Methods for selecting and reviewing states' teaching standards 3
Tables
1 Target group of teachers in reviewed teaching standards 5
2 Topic areas among teaching standards related to English language learner students 6

Topic areas among teacher standards related to accountability and student learning standards

Topic areas among teaching standards related to students with disabilities

Topic areas among teaching standards related to education technology

3

4

5

This review of teaching standards in six states—California, Florida, Illinois, North Carolina, Ohio, and Texas—focuses on the structure, target audience, and selected content of the standards to inform California's revision of its teaching standards. The report was developed at the request of key education agencies in California.

### **WHY THIS STUDY?**

This study was motivated by a joint request from California's Commission on Teacher Credentialing and the California Department of Education as part of an ongoing review of the California Standards for the Teaching Profession. The state has appointed an advisory panel to review the teaching standards and to recommend revisions to ensure that the new standards are consistent with current research, the best understanding of effective teaching practices, and California education policies.<sup>1</sup> In preparation for the panel's work, the two organizations requested that Regional Educational Laboratory (REL) West prepare an overview of teaching standards in five states, focusing on states that rank among the largest nationally. Two states—North Carolina and Ohio—were selected because of the nature of their teaching standards. Although California's teaching standards are being revised, its current standards were also reviewed as a point of comparison.<sup>2</sup> Data sources were the teaching standards themselves and related documents.

California's Commission on Teacher Credentialing and the California Department of Education requested that REL West focus the state reviews on issues that would support the deliberations of the advisory panel:

• What is the target group of teachers for the teaching standards?

A state's teaching standards may be intended for all teachers or for specific populations of teachers. In California, for example, the initial motivation for developing state standards was for use in beginning teacher induction programs, though the standards were written to apply to all teachers, beginning to advanced. In contrast, two sets of well known national standards that have informed the teaching standards for some other states are specifically directed at either expert teachers (the standards of the National Board for Professional Teaching Standards) or new teachers

The four issues discussed in this report were identified as areas in which changes in context, understanding, and policies would likely inspire revisions in related teaching standards

(those of the Interstate New Teacher Assessment and Support Consortium).

What is the structure of the teaching standards?

Because states have taken different approaches in structuring their teaching standards, the study also examined and

summarized approaches across the reviewed standards, hypothesizing that certain structural features, such as scope, length, and terminology, might relate to the way the standards are used and interpreted. (For example, might busy teachers find it easier to regularly refer to a short teaching standards document? Researchers did not investigate such relationships, but simply examined and described the standards' organizational structure.)

 To what extent do the state teaching standards address instruction of English language learner students, instruction of students with disabilities, use of education technology, and instruction in the context of accountability and student learning standards?

These four issues were identified by California's Commission on Teacher Credentialing, the California Department of Education, and other advisors to California's standards-revision process as areas in which changes in context, understanding, and policies (both in California and nationally) would likely inspire revisions in related teaching standards.

Chief among these changes has been the No Child Left Behind (NCLB) Act of 2001, with its focus on education accountability. Under NCLB, states were required to establish measures of adequate yearly progress for assessing student progress toward the goal of universal proficiency in English language arts and mathematics on state assessments by 2014. The federal law has

shined a spotlight on English language learner students and students with disabilities, seeking to ensure that these student subgroups meet the same challenging academic content and achievement standards as other students. During 2005/06 U.S. public schools educated approximately 4.2 million English language learner students and 6.7 million students with disabilities. The nearly 1.6 million English language learner students in California accounted for about 37 percent of this national population (and about a quarter of the state's overall K-12 enrollment). That same year, California's public schools served close to 700,000 students with disabilities (U.S. Department of Education, National Center for Education Statistics 2008).

The use of education technology has generally expanded in recent years across the United States. In California the ratio of students per instructional computer fell from 7.2:1 in 2000 to 5:1 in 2006, while the national average ratio fell from 4.9:1 to 3.8:1. In 2005 approximately 44 percent of California students and 50 percent of U.S. students had at least one computer available to them in their classrooms (Editorial Projects in Education, EPE Research Center 2009).

### **CROSS-STATE OVERVIEW**

This study reviewed the following primary teaching standards documents in California and five selected states (see box 1 for details on study methods and limitations):

- California Standards for the Teaching Profession (California Commission on Teacher Credentialing and California Department of Education 1997).
- Educator Accomplished Practices: Competencies for Teachers of the 21st Century (Florida Department of Education n.d.).
- Illinois Professional Teaching Standards (Illinois State Board of Education 2002a).

#### BOX 1

## Methods for selecting and reviewing states' teaching standards

Selection of states. California's Commission on Teacher Credentialing and the California Department of Education initially requested a review of the teaching standards in four large states (Florida, Illinois, New York, and Texas, each among the top 10 in student population; U.S. Department of Education, National Center for Education Statistics 2008). New York was dropped because it had not yet adopted teaching standards, and North Carolina was added on the recommendation of a national teacherinduction expert, who considered the state's standards to be of high quality.1 California's Commission on Teacher Credentialing and the California Department of Education recommended that Ohio also be added because its standards are differentiated by level of teaching performance. California's teaching standards were reviewed as a point of comparison.

Data sources, collection, and analysis. Primary teaching standards documents were identified and reviewed for the six states (California Commission on Teacher Credentialing and California Department of Education 1997; Florida Department of Education n.d.; Illinois State Board of Education 2002a; North Carolina Professional Teaching Standards Commission 2007; Ohio Educator Standards Board 2006; Texas State Board for Educator Certification 2003; Texas State Board for Educator Certification 2008: Texas State Board for Educator

Certification n.d.). Also reviewed were an introduction and a preamble published separately by Florida and Ohio as supporting documentation (Florida Department of Education 2002; Ohio Educator Standards Board 2005) and introductory language on the web site for Texas teaching standards (Texas State Board for Educator Certification 2008). The examination of the standards documents focused on the target group of teachers, structure (scope, length, and terminology), and selected content (how the standards address particular teaching-related issues).

The target group of teachers and the scope, length, and terminology were identified through references in introductions, preambles, or the standards themselves. To establish how the standards address the specific teaching-related issues of interest, standards were investigated to determine whether they explicitly referenced any of the following key terms:

- English language learner students.

  English learners, English language learners, students whose first language is not English, students for whom English is a new language, heritage language, home language, native language; language skills, language development, language acquisition, language proficiency; linguistic background, linguistic development, linguistic heritage, linguistic diversity, and linguistically sensitive.<sup>2</sup>
- Students with disabilities. Special education, special needs, disability, disabilities, and abilities.

- Education technology. Technology, technologies, technological tools, technological resources, digital information, computer, computers, software, electronic media, Internet, and intranet.
- Accountability and student learning standards. Standards and accountability.

References were then categorized according to topics that researchers identified inductively.3 One researcher grouped the references into topics; a second researcher reviewed the groups, flagging questions and suggesting changes in category assignments. The researchers discussed and resolved any concerns. Next, a third researcher, who was independent of the project, conducted a reliability check, coding all references by category and identifying discrepancies. In 74 percent of mismatches the disputed reference mentioned more than one topic. Researchers resolved the discrepancies by assigning final codes based on the action that was directly described. References were coded in two categories only when a reference explicitly included two different actions.4

Profiles of each state's teaching standards were prepared and used as the basis for the cross-state analysis (profiles are available at www.wested.org).

*Limitations*. The study had several limitations that should be considered in interpreting the results:

 Of the six sets of state teaching standards reviewed, five were

(CONTINUED)

**BOX 1 (CONTINUED)** 

### Methods for selecting and reviewing states' teaching standards

- purposefully selected based on the interests of the California requestors, and the sixth set, California's teaching standards, was included for comparison. Different information and models for consideration might have emerged if teaching standards from other states had been selected.
- Topics for the analysis of selected content were identified through keywords. As a result, references that did not meet the keyword criterion might have been missed. This would be most noteworthy when references to specific students—English language learner students, for example—are implied in broad terms, such as "all students."
- The review reflects teaching standards documents at the time of the review. California, for example, is revising its standards and expects to have adopted new standards by summer 2009. Other states may also be planning to revise their standards.

### Notes

- In preparing for the state reviews, REL
  West researchers consulted with Janet
  Gless, associate director of the New
  Teacher Center (personal communication, August 4, 2008).
- In addition, in three cases the word language was viewed in the context of the sentence and deemed to meet the criterion of "explicit reference" to English language learner students.
- When references were selected from the standards documents, the complete text of a given standard or subelement was counted as a reference even if it had

- two sentences or covered more than one topic (see box note 4).
- For example, one Florida topic identified as a technology reference was "professional teacher: Routinely demonstrates a basic level of technology competency and ensures that students have opportunities to attain basic technology literacy skills" (Florida Department of Education n.d., p. 20). This reference was coded in two technology topics: demonstrating competency with and interest in technology and effective integration into instruction. There were five instances in which references were categorized in two different topics within the same general issue (for example, English language learner students) and three instances in which references were coded in two different issues (for example, teaching standards approach to teachers' use of education technology and teaching standards approach to accountability and student learning standards) because they met the criterion for selection under both terms.

- North Carolina Professional Teaching Standards (North Carolina Professional Teaching Standards Commission 2007).
- Ohio Standards for the Teaching Profession (Ohio Educator Standards Board 2006).
- Approved New Education Standards: Pedagogy and Professional Responsibility Standards (EC-Grade 12) (Texas State Board for Educator Certification n.d.).

Researchers also reviewed supporting documentation from Florida, Ohio, and Texas (see box 1). Three of the state teaching standards reviewed here were developed after California's adoption of its standards in 1997—Illinois, North Carolina, and Ohio. Florida's were adopted in 1996 (Florida Department of Education 2002), and the data sources for Texas's standards did not identify an adoption date.

The following sections provide information about the teaching standards' target groups of teachers, structure, and approach to addressing the needs of special populations; teachers' use of education technology; and accountability and student learning standards. Unless otherwise noted, all page numbers cited refer to the state standards documents listed above.

### What is the target group of teachers for the teaching standards?

In five of the six states reviewed here, the teaching standards apply to all teachers, beginning to experienced (table 1). The preamble to California's teaching standards states that the teaching standards "were developed to address" teachers' "lifelong professional development" that begins in preservice (p. 2). The introduction to Florida's standards document explains how the standards

TABLE 1
Target group of teachers in reviewed teaching standards

State	All teachers	Beginning teachers
California	<b>V</b>	
Florida	V	
Illinois	V	
North Carolina	V	
Ohio	V	
Texas		V

Source: Authors' analysis based on data from document reviews; see box 1 for details.

are differentiated by teacher career levels. The preamble to the Illinois standards states: "We believe that Illinois must strive to ensure excellence in teaching for all students by establishing professional licensing standards and learning opportunities which will enable all teachers to develop and use professional knowledge and skills on behalf of students" (p. 1). The introduction to the North Carolina standards implies that they apply to all teachers as the "basis for teacher preparation, teacher evaluation, and professional development" (p. 1). The introductory language in Ohio's teaching standards states that they "were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers" (p. 1).

Texas is the exception. Its standards are written expressly for beginning teachers. Texas's teaching standards web site states that its teaching standards are for "beginning educators in an entrylevel position" (Texas State Board for Educator Certification 2008).

### What is the structure of the teaching standards?

Teaching standards in the six states differed in both scope and focus. California, Illinois, and North Carolina each has a single set of teaching standards that applies to all teachers across the career span. Standards in Florida and Ohio also apply to all teachers, but Florida's standards are grouped and differentiated by teacher career levels (preprofessional, professional, and accomplished; Florida Department of Education 2002, p. 1)<sup>3</sup> and Ohio's by teacher performance levels (proficient, accomplished, and distinguished; Ohio Educator Standards Board 2006, p. 5).<sup>4</sup>

California, Illinois, and North Carolina each has a single set of teaching standards that applies to all teachers across the career span. Florida's standards are differentiated by teacher career levels and Ohio's by teacher performance levels

Texas stands out from the other states. Its teaching standards cover only beginning teachers, and there are 50 different sets of standards. The sets are generally organized by content area and grade span, but five of them are categorized more generally as pedagogy and professional responsibilities standards. Four of the five are grade-span specific, but one (EC-12) applies to teachers from early childhood education through grade 12. Because this set is most similar to the California teaching standards in content and purpose, the review of Texas standards focused on the pedagogy and professional responsibility (EC-12) standards.

The professional teaching standards documents reviewed for this report varied in length between 4 pages (North Carolina) and 32 pages (Florida) and in number of standards between 4 (Texas) and 12 (Florida). The teaching standards documents for California, Illinois, North Carolina, and Ohio begin with introductory language; those for Florida and Texas begin immediately with the standards. Some of the documents refer to the state's teaching standards using brief titles, such as "Assessment" (Florida and Illinois), whereas others present the standards as statements (California, North Carolina, Ohio, and Texas). For example, North Carolina standard 2 is "Teachers establish a respectful environment for a diverse population of students."

Each teaching standard is typically followed by statements of the knowledge and skills teachers must have to meet the standard. States have different names for these statements, such as *key* 

The state teaching standards reviewed here address English language learner students in six key ways elements (California), key indicators (Florida), knowledge and performance indicators (Illinois), and teacher knowledge and application (Texas). This report refers to all of these statements as indicators.

## TO WHAT EXTENT DO THE STATE TEACHING STANDARDS ADDRESS THE IDENTIFIED ISSUES OF CONCERN?

This section explores how the state teaching standards address the needs of special populations, use of education technology, and instruction in the context of accountability and student learning standards.

### Meeting the needs of special populations

The report focused on how state standards addressed two special populations: English language learner students and students with disabilities.

English language learner students. The state teaching standards reviewed here address English language learner students in six key ways (table 2).

Recognizing or supporting diversity. Five states include a standard related to recognizing and supporting diversity that references teachers' abilities to draw on diverse backgrounds, including language (California, Florida, Illinois, North Carolina, and Ohio). For example, Illinois's competent teacher<sup>5</sup> "understands how students' learning is influenced by individual experiences, talents, and prior learning, as well as language, culture, family, and community values" (Illinois State Board of Education 2002a, p. 4), while in Ohio, "Teachers model respect for students' diverse cultures, language skills and experiences" (Ohio Educator Standards Board 2006, p. 9). Florida addresses this issue more extensively, stating, for example, that the preprofessional teacher:

Establishes a comfortable environment which accepts and fosters diversity. The teacher must demonstrate knowledge and awareness of varied cultures and linguistic backgrounds. The teacher creates a climate of openness, inquiry, and support by practicing strategies such as acceptance, tolerance, resolution, and mediation (Florida Department of Education n.d., p. 4).

Differentiating instruction. Five states consider the needs of English language learner students by

TABLE 2
Topic areas among teaching standards related to English language learner students

State	Recognizing or supporting diversity	Differentiating instruction	Selecting materials or curricula	Knowing language acquisition and other learning theory and strategies	Communicating with students and families	Assessing students language status and development
California	~	~		<b>✓</b>	~	
Florida	~	V	<b>V</b>	<b>V</b>	V	V
Illinois	~			<b>V</b>		V
North Carolina	~	V			V	
Ohio	~	V				
Texas		V		<b>V</b>		

Note: The table cites only those state teaching standards that explicitly refer to "English learners," "English language learners," "students whose first language is not English," "students for whom English is a new language"; "heritage language," "home language," "native language"; "language skills," "language development," "language acquisition," "language proficiency"; "linguistic background," "linguistic development," "linguistic heritage," and "linguistic diversity," or "linguistic sensitivity." So although, for example, Texas has a specific teaching standard that focuses on diversity, this standard was not cited because none of Texas's identified English language learner—related standards has such a focus.

Source: Authors' analysis based on data from document reviews; see box 1 for details.

emphasizing the relationship between teachers' understanding of language and culture and their differentiation of instruction (California, Florida, North Carolina, Ohio, and Texas). For example, an indicator under North Carolina's standard IV ("Teachers facilitate learning for their students") states that "teachers understand the influences that affect individual student learning (development, culture, language proficiency, etc.) and differentiate their instruction accordingly" (p. 3). In Texas the beginning teacher is able to "adapt lessons to address students' varied backgrounds, skills, interests, and learning needs, including the needs of English language learners" (p. 2).

Selecting materials or curricula. Among the states reviewed, Florida's standards were the only ones to include indicators that specifically attend to students' status as English language learners through the selection and development of instructional materials and curricula. Florida's preprofessional teacher "selects appropriate culturally and linguistically sensitive materials for use in the learning process" (p. 4), while its accomplished teacher "develops instructional curriculum with attention to . . . first and second language acquisition processes" (p. 26).

Knowing language acquisition and other learning theory and strategies. Although the state teaching standards reviewed here do not reference specific theories, standards for four states (California, Florida, Illinois, and Texas) mention keeping abreast of new knowledge on teaching English language learner students. For example, Florida's professional teacher "is informed about developments in instructional methodology, learning theories, second language acquisition theories, psychological and sociological trends, and subject matter in order to facilitate learning" (p. 13). Illinois's competent teacher "understands the process of second language acquisition and strategies to support the learning of students whose first language is not English" (p. 4).

Communicating with students and families. Three state teaching standards address English language

learner issues by emphasizing the ability to communicate with students and their families for whom English is not the first language (California, Florida, and

All of the reviewed state teaching standards consider the instruction of students with disabilities

North Carolina). California's teachers are encouraged to "engage families as sources of knowledge about students' linguistic and social backgrounds" (p. 21), while Florida's preprofessional teacher "identifies communication techniques for use with colleagues, school/community specialists, administrators, and families, including families whose home language is not English" (p. 2). And in North Carolina's standards teachers are "perceptive listeners and are able to communicate with students in a variety of ways even when language is a barrier" (p. 4).

Assessing students' language status and development. Teaching standards in Florida and Illinois address the assessment of students' language status and development. Florida's standards refer to professional and accomplished teachers using assessment data to determine the "language development progress" of incoming students (pp. 11, 21). Illinois's standards are more explicit, stating that the competent teacher "uses assessment strategies and devices which are nondiscriminatory and take into consideration the impact of disabilities, methods of communication, cultural background, and primary language on measuring knowledge and performance of students" (p. 8).

Students with disabilities. All of the reviewed state teaching standards consider the instruction of students with disabilities. Table 3 summarizes the topics that are addressed in the indicators identified for this review.

The Illinois teaching standards offer the most extensive guidance. Each of the 11 Illinois professional teaching standards includes knowledge and performance indicators related to students with disabilities, and these indicators cover all the topics in table 3. Two of the topics are unique

TABLE 3	
Topic areas among teaching stan	dards related to students with disabilities

State	Teacher attitudes and self assessment	Assessing students with disabilities	Patterns or styles of learning	Identification	Inclusion	Differentiated instruction	Collaboration with Individual ized Education Program teams and other stakeholders	Students rights <sup>a</sup>
California					<b>~</b>	~		
Florida						V		
Illinois	V	V	V	V	~	V	<b>V</b>	V
North Carolina					V	V	V	
Ohio				V		V	<b>V</b>	V
Texas			V		~		<b>V</b>	~

Note: The table cites state teacher standards that explicitly refer to "special education," "special needs," "disability," "disabilities," or "abilities."

a. Includes rights guaranteed by state and federal law and also other guidelines, policies, and safeguards implemented to ensure equitable treatment of students with disabilities.

Source: Authors' analysis based on data from document reviews; see box 1 for details.

to the Illinois standards: teacher attitudes and self-assessment, and appropriate assessment of students with disabilities. For example, the competent teacher in Illinois understands the "attitudes and behaviors that positively or negatively influence behavior of students with disabilities" (p. 9); is committed "to developing the highest educational and quality-of-life potential" of these students (p. 10); and "assesses his or her own needs for knowledge and skills related to teaching students with disabilities" (p. 9). On the appropriate assessment of students with disabilities the competent teacher not only knows "methods for monitoring progress of individuals with disabilities" but also considers "the impact of disabilities . . . on measuring knowledge" and knows the "guidelines regarding assessment [and inclusion in statewide assessments] of individuals with disabilities" (p. 8).

Illinois and Texas have teaching standards that address patterns or styles of learning among students with disabilities. In Illinois, for example, the competent teacher knows "how a student's disability affects processes of inquiry" (p. 3) as well as the impact of "cognitive, emotional, physical, and sensory disabilities on learning and communication

processes" (p. 4). Similarly, the beginning teacher in Texas knows and understands "physical accessibility as a potential issue in student learning" (p. 9).

The Illinois and Ohio teaching standards stand alone in their focus on the identification of students with disabilities. Ohio's teachers "recognize characteristics" of students with disabilities "in order to assist in appropriate identification, instruction, and intervention" (p. 10). In Illinois the competent teacher "knows identification and referral procedures" for these students (p. 10).

The remaining topics listed in table 3—inclusion, differentiated instruction, collaboration with Individualized Education Program teams and other stakeholders, and students' rights—were each addressed in three to five of the state standards reviewed. Selected examples of the state teaching standards in these topics follow:

• Inclusion. California teachers are encouraged to create "inclusive classrooms in which diverse students with varying learning styles and abilities are engaged and challenged as learners" (p. 3). In North Carolina teachers

engage students with special needs "through inclusion and other models of effective practice" (p. 2).

- Differentiated instruction. Ohio's teachers "differentiate instruction to support the learning needs of all students, including . . . students with disabilities" (p. 20). North Carolina's teachers "adapt their teaching for the benefit of students with special needs" (p. 2).
- Collaboration with Individualized Education Program teams and other stakeholders. North Carolina teachers "collaborate with the range of support specialists to help meet the special needs of all students" (p. 2), while the competent teacher in Illinois "knows the roles and responsibilities of teachers, parents, students and other professionals related to special education" (p. 10) and "collaborates in the development of comprehensive [Individualized Education Programs] for students with disabilities" (p. 9).
- Students' rights. Texas's beginning teachers know and understand "legal requirements... related to special education, students' and families' rights, student discipline, [and] equity" (p. 16). In Illinois the competent

teacher "knows applicable laws, rules and regulations, procedural safeguards, and ethical considerations regarding planning and

Teachers' use of technology is explicitly addressed in all the teaching standards reviewed for this study

implementing behavioral change programs for individuals with disabilities" (p. 6).

### Using education technology

Teachers' use of technology is explicitly addressed in all the teaching standards reviewed for this study (table 4). Florida's "Technology" teaching standard lists key sample indicators for each of the state's three teaching levels, Illinois references education technology under 6 of its 11 standards, and Texas addresses technology under 3 of its 4 pedagogy and professional responsibility (EC-12) standards. In addition to the technology-related references in the main teaching standards documents, Illinois and Texas have separate sets of standards on classroom technology (Illinois State Board of Education 2002b; Texas State Board for Education Certification 2003).

Standards in Florida, Illinois, and Texas all touch on the following topics related to classroom

TABLE 4
Topic areas among teaching standards related to education technology

State	Identifying technology and evaluating its instructional value	Effectively integrating technology into instruction	Understanding conventions for managing electronic information	Using technology to assess students	Demonstrating competency with and interest in technology	Collaborating and communi cating on the use of techno logical tools	Using assistive technology for students
California		<b>V</b>	<b>v</b>		<b>V</b>		
Florida	V	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	~	<b>V</b>
Illinois	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>		<b>'</b>
North Carolina		V					
Ohio		<b>V</b>				~	
Texas	V	<b>V</b>	<b>V</b>	<b>V</b>			

Note: The table cites state teaching standards that explicitly refer to "technology," "technologies," "technological tools," "technological resources," "digital information," "computer," "computers," "software," "Internet," or "intranet."

Source: Authors' analysis based on data from document reviews; see box 1 for details.

All six states have included in their teaching standards references to their learning standards for students. These references tend to emphasize teacher knowledge of the learning standards and an ability to deliver instruction based on the standards

technology: identifying technology and evaluating its instructional value, effectively integrating technology into instruction, understanding conventions for managing electronic information, and using technology to assess students.

California, Florida, and Illinois teaching standards address teachers' technological competency. For example, California asks

its teachers to expand their "knowledge of new instructional methods and technologies" (p. 21), while the professional teacher in Florida "routinely demonstrates a basic level of technology competency" (p. 20).

Florida and Ohio teaching standards address a topic not mentioned in any other standards in this review: collaborating and communicating on the use of technological tools. For example, Florida's preprofessional teacher "uses technology to collaborate with others" (p. 10) while the professional teacher "participates in collaboration via technology to support learning" (p. 20). Ohio's standard 4 expects distinguished teachers to "help their colleagues understand and integrate technology into instruction" (p. 21). Similarly, Florida and Illinois are the only states among those reviewed that focus on the use of assistive technology for students who need such support. The professional teacher in Florida "uses accessible and assistive technology to provide curriculum access to those students who need additional support" (p. 20), while the Illinois teaching standards state that the competent teacher "utilizes adaptive devices/ technology to provide access to general curricular content to individuals with disabilities" (p. 3).

Overall, the teaching standards in North Carolina and Ohio address education technology more narrowly than do the standards in the other states. With the exception of Ohio's reference to collaboration already noted, these two states focus primarily on effective integration of technology in

the classroom (a topic also addressed by the other states in the review). For example, North Carolina's standard IV states that teachers "integrate and utilize technology in their instruction . . . to maximize student learning" and also "help students use technology to learn content, think critically, solve problems, discern reliability, use information . . . [and] innovate" (p. 4). Ohio's standard 4 expects the state's accomplished teachers to "develop students' abilities to access, evaluate and use technology" (p. 21).

### Considering accountability and student learning standards

Four of the state teaching standards reviewed here (California, Florida, Illinois, and Texas) were conceptualized in the late 1990s as part of a shift toward standards-based education that included implementation of statewide systems of student content standards and assessments. Thus, teaching standards in these states tend to complement student learning standards within the state's accountability system. In Texas, where the teaching standards tend to be content-area specific and aligned with student learning standards, the two types of standards have consistently been revised together to ensure that alignment.

All six states have included in their teaching standards references to their learning standards for students (table 5). These references tend to emphasize teacher knowledge of the learning standards and an ability to deliver instruction based on the standards. For example, California teachers are encouraged to "use subject matter standards from district, state, and other sources to guide how [they] establish learning goals for each student" (p. 17). Florida's professional teacher "provides comprehensible instruction based on performance standards required of students in Florida public schools" (p. 18). Ohio expects its accomplished teachers to "extend and enrich curriculum by integrating school and district curriculum priorities with Ohio's academic content standards and national content standards" (p. 13). Texas's pedagogy and professional responsibility (EC-12) teaching

ABLE 5
Topic areas among teacher standards related to accountability and student learning standards

State	Knowing and understanding standards	Using standards to plan instruction	Delivering standards based instruction	Assessing students progress on standards
California		<b>✓</b>		<b>✓</b>
Florida			V	V
Illinois	<b>V</b>			V
North Carolina	<b>V</b>	V	V	
Ohio	<b>V</b>		V	
Texas	<b>V</b>	V		

Note: The table cites state teaching standards that explicitly refer to "standards" or "accountability."

Source: Authors' analysis based on data from document reviews; see box 1 for details.

standards insist that the beginning teacher should know and understand the "importance of the state content and performance standards" and should "use the Texas Essential Knowledge and Skills (TEKS) to plan instruction" (p. 3).

North Carolina's student learning standards, Standard Course of Study, are referred to primarily in teaching "Standard III: Teachers know the content they teach." Teachers are expected to know the student learning standards in their specialty areas, plan instruction aligned with the standards, and help students make connections between the student learning standards and "21st century content, which includes global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; and health awareness" (p. 3).

Three states (California, Florida, and Illinois) address teachers' ability to assess students' progress toward meeting the state learning standards. For example, California teachers "assess students to support student learning goals [and] district standards" (p. 18). Florida has its accomplished teachers communicate with students "to assess the relevance of the curriculum and adequacy of student progress toward standards" (p. 22). The competent teacher in Illinois "understands assessment as a means of evaluating . . . what [students] know and are able to do in meeting the Illinois Academic Standards, and what kinds of

experiences will support their further growth and development" (p. 8).

#### CONCLUSION

Each of the six states whose standards were reviewed has taken a distinctive approach to the design of its teaching standards, and each set of standards may offer different insights to the people involved in developing and supporting teaching standards in other states. For example, the differentiation of teaching standards by career levels in Florida and by performance level in Ohio may interest states whose teaching standards are not currently differentiated in this way. North Carolina's succinct teaching standards—just four pages—offers another model. Texas has 50 different sets of teaching standards that are, for the most part, aligned to content areas and grade spans.

Analysis of how these states addressed the issues selected for this review revealed similarities and differences across states. Florida has the longest set of standards, and the standards cover the greatest number of topics related to English language learner students and education technology. Teaching standards in Illinois cover the greatest number of topics related to students with disabilities. On accountability and student learning standards no one state stood out for the breadth of attention to

Collectively, the six sets of state teaching standards reviewed offer various options for broad consideration, such as structure and target group of teachers. They also offer specific details on issues and topics emphasized and on language choices

these topics; rather, all of the states focused on a small set of related topics.

In each issue area certain topics stood out because they are addressed most frequently by the six states. Instruction of English language learner students is addressed by four or more states through the following topics: recognition or support of diversity, differentiation of instruction for English lan-

guage learner students, and knowledge of related theory or strategies. Instruction of students with disabilities is most commonly addressed through references to inclusion, differentiated instruction, and collaboration with Individualized Education Program teams and other stakeholders. The use of technology in the classroom was addressed most frequently through the following topics: effective integration into instruction and conventions for accessing or managing information. Finally, the only topic related to accountability and student learning standards addressed by a majority of the states is teachers' knowledge and understanding of state learning standards.

Collectively, the six sets of state teaching standards reviewed offer various options for broad consideration, such as structure and target group of teachers. They also offer specific details on issues and topics emphasized and on language choices. Individual state profiles, available online at www. wested.org, include extensive excerpts from the teaching standards documents. The excerpts are generally organized according to the issues and topics outlined in this overview, as a reference.

### **NOTES**

- Ed Code section 44279.2(a)(7) specifies this
  process for periodically evaluating the validity
  of the *California Standards for the Teach-*ing Profession (California's Commission on
  Teacher Credentialing and the California
  Department of Education 1997).
- California's revised standards are expected to be available in August 2009 at www.ctc. ca.gov/.
- 3. An overview of Florida's Educator Accomplished Practices states: "The first benchmark is called 'preprofessional' and refers to what the State expects teachers who have just received their teaching degree to know and be able to do. . . . The other two benchmarks [are] 'professional' (teachers who have received their first five-year permanent certificate) and 'accomplished' (outstanding teachers)" (Florida Department of Education 2002, p. 1).
- 4. According to the Ohio Standards for the Teaching Profession, "At the Proficient level, teachers demonstrate knowledge of the skills

- and abilities needed for effective content-area instruction. They are in the process of refining their skills and understandings to fully integrate their knowledge and skills. . . . At the Accomplished level, teachers effectively integrate the knowledge, skills and abilities needed for effective content-area instruction. They are fully skilled professionals who demonstrate purposefulness, flexibility and consistency. They anticipate and monitor situations in their classrooms and schools, and make appropriate plans and responses . . . At the Distinguished level, teachers and principals use their strong foundation of knowledge, skills and abilities to innovate and enhance their classrooms, buildings and districts. They are leaders who empower and influence others. They anticipate and monitor situations in their classrooms and schools and effectively reshape their environments accordingly." (Ohio Educator Standards Board 2006, p. 5).
- Although Illinois does not differentiate its teaching levels, all of its knowledge and performance indicators begin with the phrase "The competent teacher."

### **REFERENCES**

- California Code of Regulations, Ed Code section 44279.2(a)(7).
- California Commission on Teacher Credentialing and California Department of Education. (1997). *California standards for the teaching profession*. Retrieved August 2008, from www.ctc.ca.gov/reports/cstpreport.pdf.
- Editorial Projects in Education, EPE Research Center. (2009). Education Counts database. Retrieved January 2009, from www.edcounts.org/createtable/step1.php.
- Florida Department of Education. (2002). *Overview: introduction to the educator accomplished practices.*Tallahassee, FL: Florida Department of Education. Retrieved September 2008, from http://coe.fau.edu/OASS/student\_teaching/EAP-Overview.pdf.
- Florida Department of Education. (n.d.). Educator accomplished practices: competencies for teachers of the 21st century. Tallahassee, FL: Florida Department of Education, Bureau of Educator Recruitment, Development and Retention. Retrieved August 2008, from www. fldoe.org/dpe/pdf/AccomPractices\_11-09-07.pdf.
- Illinois State Board of Education. (2002a). *Illinois professional teaching standards*. Retrieved August 2008, from www.isbe.state.il.us/profprep/pdfs/ipts.pdf.
- Illinois State Board of Education. (2002b). *Technology standards for all Illinois teachers* [24.120] (2nd ed.). Retrieved August 2008, from www.isbe.state.il.us/prof-prep/CASCDVr/pdfs/24120\_coretechnology.pdf.
- Interstate New Teacher Assessment and Support Consortium (INTASC). (1992). Model standards for beginning teacher licensing, assessment and development: A resource for state dialogue. Washington, DC: Interstate New Teacher Assessment and Support Consortium. Retrieved August 2008, from www.ccsso.org/content/pdfs/corestrd.pdf.

- National Board for Professional Teaching Standards (NBPTS). (1989, revised 2002). What teachers should know and be able to do. Retrieved August 2008, from www.nbpts.org/UserFiles/File/what\_teachers.pdf.
- North Carolina Professional Teaching Standards Commission. (2007). North Carolina Professional Teaching Standards. Raleigh, NC: North Carolina Professional Teaching Standards Commission. Retrieved August 2008, from www.ncptsc.org/Final%20Standards%20 Document.pdf.
- Ohio Educator Standards Board. (2006). *Ohio standards for the teaching profession*. Retrieved August 2008, from http://esb.ode.state.oh.us/Word/Oh\_Standards\_For\_TchingProf\_8\_30\_06.doc.
- Texas State Board for Educator Certification. (2003). *Approved new educator standards: technology applications*. Retrieved September 2008, from www.sbec. state.tx.us/SBECOnline/standtest/standards/techapp. pdf.
- Texas State Board for Educator Certification. (2008). *Approved New Educator Standards*. Retrieved September 2008, from www.sbec.state.tx.us/SBECOnline/standtest/edstancertfieldlevl.asp.
- Texas State Board for Educator Certification. (n.d.).

  Approved new educator standards: pedagogy and professional responsibility standards (EC-Grade 12).

  Retrieved September 2008, from www.sbec.state.tx.us/SBECOnline/standtest/standards/allppr.pdf.
- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2008). Common Core of Data (CCD), local education agency (school district) universe survey, 2005–06 v.1a; State nonfiscal public elementary/secondary education survey data, 2005–06 v.1a. Washington, DC. Retrieved September 2008, using NCES Build a Table web tool (http://nces.ed.gov/ccd/bat/).