Chapter 6

Content Standards

Highlights of Findings

- **Almost all districts have recently completed a lengthy, broad-based standards development process.**
  About 90 percent of district survey respondents reported that their districts have adopted mathematics and English / language arts content standards. For most of these districts, this adoption has taken place in the past three years. Developing standards is a lengthy, complicated, iterative, and ongoing process involving many district, school, and community stakeholders.

- **Districts claim that the state standards were used to develop or modify local standards, but the rigor of local standards remains uncertain.**
  Once the state standards were adopted by the State Board, most local districts report that they either adopted them in whole or used them for comparison purposes in developing or modifying existing local standards. Given that many districts had already developed local standards prior to the establishment of the state standards, this alignment process was sometimes a source of frustration. Most districts also report their local standards to be as rigorous as state standards. However, an analysis of some districts' local standards by project staff raised questions about such claims.

- **Local content standards have yet to make a consistent impact at the classroom level.**
  Although most districts report that the majority of teachers are using local standards in the classroom, school-level observations and interviews suggest otherwise. There is an increasing disparity in how content standards are understood and used as they filter down to the school and classroom level. The apparent lack of alignment between curriculum and standards, as well as the inadequate time spent on professional development related to standards, may contribute to this problem.

Content standards — what students should know and be able to do at each grade level — are the first building block of a standards-based accountability system. If schools are going to be held accountable for ensuring that students master certain content, then that content must be clearly specified. Content standards perform that function.

The movement to establish content standards is due at least in part to federal legislation passed in 1994. This bill, called the Improving America's Schools Act (IASA), mandates that districts adopt academic standards at least in the areas of reading and mathematics if they wish to receive federal funding. California began requiring districts to develop local reading and mathematics content standards for reporting purposes in 1996–97 if they were undergoing a Coordinated Compliance Review (CCR) or submitting a Consolidated Application for categorical funding (most districts fall into at least one of these categories).

The following year, in 1997, the California State Board of Education adopted statewide standards in English/language arts and mathematics, followed by science standards in 1998. Districts were required to align their local standards with the new state standards in order to ensure that the local standards are "at least as rigorous as" the state standards.

For the purposes of this study, the overarching research questions on the topic of content standards were:

> ***What is the nature of local content and performance standards in language arts and mathematics and how do they compare with state standards? What mechanism does the district use to compare its standards with the state's model standards?***
>
> ***To what degree have district standards been implemented in schools? At what stage or level are districts and schools in planning and implementing the district standards?***

Development and Adoption of Local Content Standards

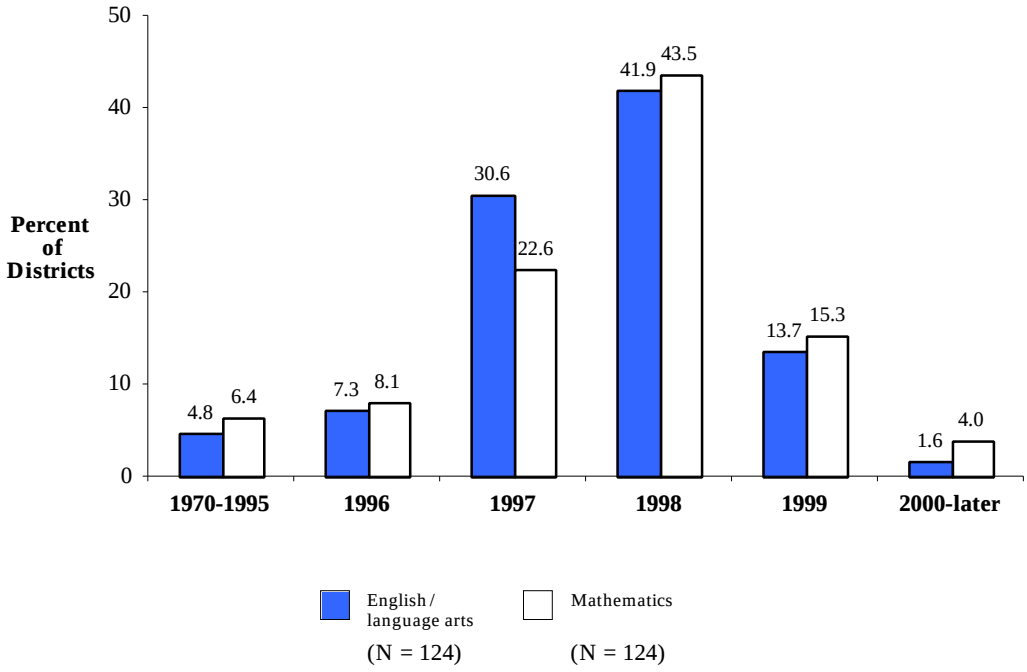
> *I believe standards are important. You have to know where you're going before you take off or you're going to just be everywhere. They've influenced me more since I've come to California. To me, "standard" is just a word that gets everybody to the same. If these are what are going to get all to the same page so we can be assessed in the same way, then good. It's important. They're not just a measure of what kids do, they're a measure of what we [teachers] do. I think standards have also helped us talk about what we do.*
>
> *— Teacher*

♦ **Most districts report that their current content standards have been adopted only recently and apply equally to all students in the district.**

According to the district survey, most districts have now adopted content standards in English / language arts (91 percent of districts) and mathematics (86.5 percent of districts). In general, these standards are relatively new; for both subject areas, between 55 and 60 percent of districts reported that the standards were adopted in 1998 or 1999. That is, districts in California have moved from not doing much vis-à-vis standards to a flurry of activity. (See Figure 6.1.)

Figure 6.1

Reported Years Districts Adopted Content Standards for English / Language Arts and Mathematics



These survey results suggest that districts' Consolidated Application accountability plans — even those submitted for 1998–99 — were not necessarily a good indicator of whether districts have adopted content standards. An independent review of 36 of the accountability plans found that it was unclear what, if any, standards had been adopted by 10 (27.8%) of these districts. The official CDE review of the plans, similarly, found that among 190 districts (190 of the 200 districts that were surveyed for this study), 52 (27.4%) needed to

clarify where they were in the process of adopting/implementing mathematics and/or language arts standards. However, it cannot be concluded that these districts had not in fact adopted standards — it can only be concluded that they did not mention standards in their accountability plans.

Most districts, it seems, hold all students in the district to the same standards. Less than one percent of survey respondents said that different district schools use different content standards, and CDE found that only about 5 percent of the 190 accountability plans did not appear to hold all groups of students to the same academic standards.

- **Development of local content standards in English/language arts and mathematics has been a broad-based, lengthy process, and for many districts is still continuing.**

Both survey results and interviews suggest that the development of local standards has been a fairly broad-based process, involving many stakeholders. Over 70 percent of districts surveyed indicated the involvement of the district accountability and/or assessment director(s), and over 80 percent mentioned the participation of district or school administrators. Not too surprisingly, almost all districts indicated that teachers were involved. Some 60 percent of districts reported that school board members were involved, and about 50 percent indicated that parents had been involved.

District interviews confirmed that local standards have been developed in committee with much participation from teachers, principals, district staff, and the community. The interviews also highlighted that, perhaps because of the number of people involved, the development of standards is a lengthy process. In one of the districts in which interviews were conducted, where committees of principals and teachers developed key indicators of what students should be able to do at each level and provided examples of student work, the development of standards and assessments has been a four-year process of revisions. In fact, it is still considered an ongoing work-in-progress. A similar picture emerged in other districts that hosted interviews. Three other districts that have been involved in developing their own standards have been doing so for at least two years, and a fourth district stated that the process had taken "well over a year."

Relationship of District Standards to the State Standards

> *I know we have new state standards and also district standards that are aligned with the state…. I have the state standards but I don't really refer to them.*
>
> *— Teacher*

- **Survey responses indicated that district standards were based on the state standards, but some districts developed their local standards prior to the adoption of the state standards.**

Over 90 percent of survey respondents indicated that the state standards (the English/Language Arts and Mathematics Content Standards adopted by the State Board of Education in 1997) served as one of the bases for district content standards. No other sources were cited even remotely as often as the state standards. (The second most frequently cited basis was the NCTE or NCTM standards, which about 30–35 percent of districts identified.) Many districts, however, developed local standards *prior* to the state adoption and subsequently *revised* their standards so as to be more consistent with the state standards.

- **Although districts may consider their standards to be at least as rigorous as the state standards, this judgment may not always be accurate.**

When the state standards were adopted, districts that had already developed their own standards were charged with comparing their standards with the new state standards. If their standards came out "less rigorous" than the state's, districts were faced with a choice: abandon the standards they had developed and adopt the state standards instead, or revise their local standards to align them with the state standards.

Over 85 percent of survey respondents reported that their districts had either compared the district standards to the state standards for rigor or had simply adopted the state standards.[1] As for the results of the comparisons, 90.6 percent of these respondents reported that the district standards in English/language arts had been found to be "as rigorous" or "more rigorous" than the state standards. For mathematics, the figure was a bit lower; 80 percent of districts reported existing district standards as rigorous or more rigorous than the state standards. (A couple of respondents identified eighth grade algebra as the reason for the disparity.) These findings are consistent with the CDE review of the 190 accountability plans, in which only 11 percent of districts were found to have local standards that did not appear to be aligned with or as rigorous as the state standards.

An independent analysis of a small sample of district standards, however, revealed that districts' appraisals of rigor may have been overly optimistic. Standards from five districts were reviewed in comparison to the state standards; of these five districts, four had returned the survey. Of these four, two reported on the survey that their district standards were more

[1] Survey districts did not, however, provide much detail about how exactly the comparison was made. The most common response (provided by over 60 percent of respondents) was along the lines of, "A district committee compared the existing local standards with the state standards." Another 26 percent replied that they had either adopted the state standards in their entirety or had used the state standards as a guide in the development of their local standards.

rigorous than the state's. The independent analysis concurred. For the other two, however, opinions diverged. Both of these two districts reported on the survey that their local standards were as rigorous as the state's. The independent analysis, however, found that both districts were less rigorous. (See box.)

How Local Standards Compare with the State Standards: An Independent Analysis For Five Districts

The mathematics and language arts standards of five districts were compared to the state's documents for grades 3, 4, 7, and 8.[2] The standards were compared according to the state's definition of rigor — breadth, depth, pace of learning, and levels of performance.[3]

Findings in Mathematics

- At grades 3 and 4, three districts' standards appear to be less rigorous than the state's in terms of breadth, depth, and pace of learning, and two districts are more rigorous.
- The two more demanding districts generally had more depth to their required standards. Both "more rigorous" districts also require more writing about mathematics and more interdisciplinary connections with mathematics.
- At the 7th grade, two districts' standards are about the same as the state's (only slightly less rigorous), one district is below, and standards in the remaining two districts' standards are above the state's standards.
- For 8th grade, two districts list "Algebra 1" standards. Another district does not have standards specifically for the 8th grade, and two districts have "Grade 8" standards. The "Pace of Learning" for both "Grade 8" districts is much slower than the state recommends.
- The state's 25 standards for algebra are less rigorous in terms of breadth than those of two of the districts. Both districts have much greater specificity than the state; one district adds standards and indicators for "Tools and Technology," "Student Accountability," and "Connections."
- In most cases, consistency in alignment, performance, and rigor of mathematics standards seems to be somewhat lacking, based on these five examples.

Findings in Language Arts

- More so in language arts than mathematics, districts seem lenient with regard to the extent to which the standards have to be met at each grade level. Two districts acknowledge that the standards are "goals" — "where we want to go" and may not necessarily be intended to "reflect a full language arts curriculum." The overall pacing between grade levels in language arts seems less rigorous, or perhaps less rigid than with mathematics.
- At grades 3 and 4 two districts appear less demanding than the state — once again they lack specificity with regards to the state's content areas. The three remaining districts are either on par with the state or a little above it. Unlike the state, these three districts make references to interdisciplinary work as well as "real world" connections.

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[2] See Chapter 4, "Methodology," for an explication of the process used in this comparison.
[3] Memo entitled *Establishing District Standards "at least as rigorous" as California's State Standards*, Standards and Curriculum Office, California Department of Education, March 18, 1998.

How Local Standards Compare — continued

- Districts that seem more demanding than the state at the 3rd grade may not be so in 4th grade because the state requires growth in each content area between the 3rd and 4th grades whereas some districts do not.
- For the 7th grade in particular, a common problem is that district standards either become less specific than the state's or too specific. The lack of specificity means less rigor (according to the state's definition), yet too much specificity leaves one to question the larger picture.
- Pacing between 7th and 8th grade is uneven and dependent upon a district's priorities. One district collapses 7th and 8th grade standards into one list which makes it doubtful that the 8th graders in that district are meeting the state's recommended standards for "Pace of Learning" even when at every other grade level the district appears to have more rigorous standards.

Overall, the five districts demonstrate the levels of confusion reigning around the status of content standards in California. Some districts obviously created standards prior to the state and later attempted to adapt these standards to meet the state's "at least as rigorous" requirements. Other districts seem to have continued using their local standards without much attention to the State Board's action.

Perhaps even more importantly, this analysis reveals the difficulties involved in making determinations of rigor. Shades of meaning can make the difference in terms of breadth and depth, and in many cases, it is clear that districts simply have different priorities than the state regarding what students should know and be able to do. The question of how qualitatively differing priorities compare in "rigor" has no "right" answer.

Figure 6.2
Matrix Examining Mathematics and Language Arts Standards
Across Five Districts at Four Grade Levels

District:	**1**		**2**		**3**		**4**		**5**	
Grade:	***Math***	***Lang.***	***Math***	***Lang.***	***Math***	***Lang.***	***Math***	***Lang.***	***Math***	***Lang.***
3	-	-	++	++	--	--	+	+	-	✓
4	--	-	++	-	na	na	+	✓	-	✓
7	-	-	++	na	--	--	++	✓	✓	✓
8	--	-	++	na	na	na	++	--	--	✓
Overall indep. rating	--	-	++	+	--	--	++	✓	-	✓
District's survey self-rating	✓	✓	++	++	✓	✓	++	++	na	na

Key:	++	+	✓	-	--	na
	more rigorous	slightly more rigor	as rigorous as	slightly less rigor	less rigorous	not available

- **For many districts, alignment of the local standards with the state standards is an ongoing — and sometimes daunting — process.**

Survey responses offer only a glimpse of the process that districts use to align their standards with those of the state. Among survey respondents who indicated district standards (for mathematics, language arts, or both) "less rigorous" than state standards, some commented that they had later adjusted their district standards to be as rigorous. Others wrote that their districts had decided to replace the district standards with the state standards. District interviews provided greater detail about the process of aligning district standards with the state standards.

District A

In District A, when the state standards came out, teacher committees sat down to align the pre-existing district standards with the state standards. In some instances, only slight modifications were necessary. In other instances, there were major differences between the state and district standards, and the committee decided to scrap the district version and adopt the state's instead. There was great frustration about having all that work — the development of the local standards — "wasted" as a result of state policy changes. The alignment process began two years ago, and was completed in spring 1999. The revised math standards did not pass the school board the first time and had to undergo further revisions.

District B

In other districts, alignment of the district standards with the state standards is an ongoing process. In District B, for example, the Director of Research and Evaluation commented that, although they had local standards in place before the state issued its standards, they have been adapting their standards to align with the state's. This interviewee said that they have a flexible system in which they can revise their standards whenever needed. He also said that in his opinion, the state standards are more rigorous than the local standards in some grades. (The independent analysis agreed that this district's standards, at least in their current incarnation, are less rigorous than the state's.) This was in contrast to the survey response from this same district, which indicated that the district standards were "as rigorous" as the state's.

District C

In District C, when the state standards came out, the district compared them to their own standards. An administrator who was interviewed reported that the standards were very similar in reading, but somewhat more discrepant in math, and the district is still working on aligning them.

This was a district in which school-level interviews (for the Mathematics Implementation project) also occurred, and unlike in the other districts where schools were visited, many of the principals and teachers in this district seemed familiar with the state standards and other standards, as well as with their district standards. Without being prompted to do so, many offered comparisons between the various sets of standards. One principal, for example, remarked on philosophical differences between the state standards and the NCTM standards, suggesting that the state standards focus "less on the process and more on the skills." Another principal compared the district standards to the state standards, saying that she thought the district standards were more rigorous than the state's. (The independent analysis agreed.)

Teachers in this district, too, seemed familiar with the state standards. However, they did not necessarily agree with one another on the relationship of the district standards to the state standards. One teacher, for example, said that the district standards were "more stringent and require more" than the state standards, but another teacher said that "the district standards are not as difficult as the state standards because the district standards do not have algebra, geometry, or integers." A third teacher stated nonjudgmentally that "The district has more reasoning and communications and the state has more on integers and negative numbers."

Moreover, teachers in this district did not agree on the extent to which the state standards had been used in the development of the district standards. One teacher stated that "I am accountable to my district standards, I look for the logical thinking and there's not really any state standards influence." In contrast, another teacher — who had recently finished working on performance assessments in the district office and said that he was "very involved" in standards and frameworks — remarked that the district standards were based on the state standards. A second teacher at the same school said that she was "aware that the district is trying to align its standards to state standards."

- **At the school level, there is considerable confusion and frustration about different sets of standards.**

Although principals and teachers in District C were unique among districts visited in their awareness of the different sets of standards, their confusion about the relationships between these standards was far from unique. Also, many principals and teachers used the term "standards" to refer to different documents. For example, in discussing the "state standards," some people were talking about the 1997 State Board adopted standards, whereas others were talking about the 1992 Framework. Similarly, some people used "standards" to refer to the NCTM standards; others meant the state standards; and others meant their district standards.

Indeed, several principals and teachers reported confusion and frustration about having different sets of standards (e.g., national, state, district) or about having standards constantly changing:

> *[From a teacher] At all three levels [national, state, district] we have been bombarded. When we, as the math department, were given the standards, the NCTM, state, and local standards all conflicted with each other. We adopted the NCTM standards, which used to be closely aligned with the state standards. The state standards are what we are tested on. The new state standards are very different…It seems like a moving target. Every couple of years the state comes out with a different strategy and we all change and then things change again.*

> *[From a principal] I don't think teachers are very tuned to standards. There's confusion. Our people are lost. Our standards aren't exactly the same as the state's and there's confusion about why they would have different standards.*

> *[From a principal] Teachers are confused by the standards and they ask for more specifics. They [teachers] have not seen the new standards. Also, parents have been very upset about the changes in standards.*

Implementation of the Standards in the Classroom

> *The alignment process of instruction and assessment has been an ongoing process. The discussion is now at the classroom level, and positive.*
>
> *— District Survey Response*

> *The state's standards seem to be covered in almost anything that we do anyway. I don't spend too much time matching individual standards with what I'm teaching.*
>
> *— Teacher*

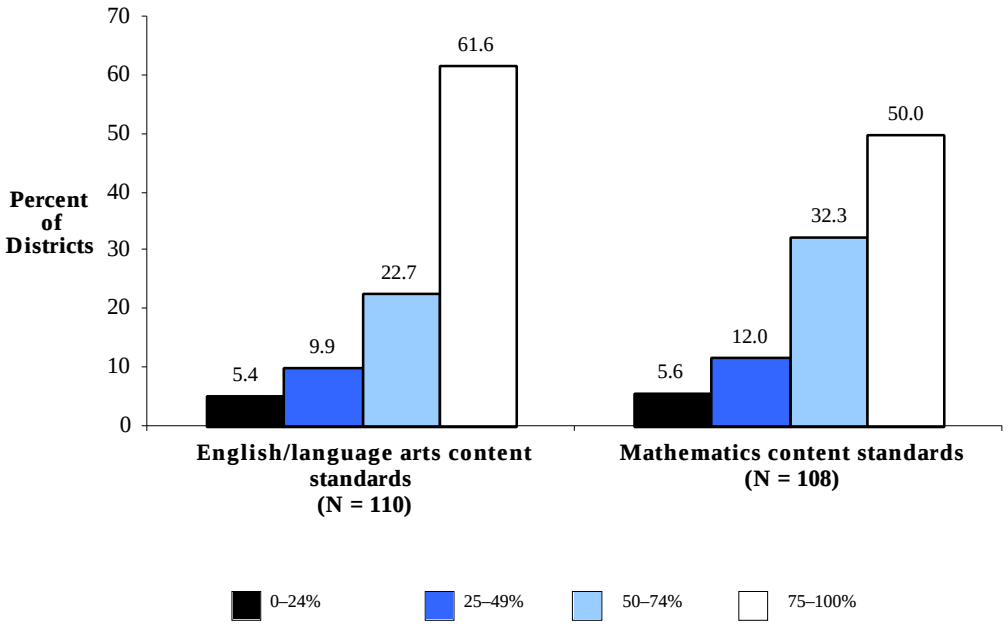
- **Impact and use of content standards is highly variable. Despite optimistic impressions voiced by district-level personnel, the standards *per se* do not currently appear to be having a high level of meaningful impact on classroom mathematics instruction.**

Even the most thoughtfully developed content standards are meaningless if they are not implemented at the classroom level — in other words, if the standards do not exert any influence on daily instruction. Most district survey respondents were optimistic about the extent to which classroom implementation of the standards has occurred. They thought teachers were further along in using the language arts standards than the math standards,

as Figure 6.3 shows. For English / language arts, 68 of 110 respondents (61.6%) estimated that 75 percent or more of district's teachers reflect the district standards in their classroom teaching. For mathematics, 54 of the 108 respondents (50%) estimated 75 percent or more of teachers. However, about 15 percent of districts who returned the survey declined to make these estimations at all.

Figure 6.3

District Reporting of Estimated Percentage of Teachers Whose Classroom Teaching Reflects District Content Standards



Both school-level observations and interviews suggested that implementation of the standards may not be at the high level suggested by the survey responses. In seven out of eight districts where school-level visits took place, impact of standards on mathematics curriculum and instruction was highly variable. (See the "District Spotlight" on the following page for a discussion of the eighth district.) This variability was across districts, across schools within a given district, and even across teachers within a given school.

For example, a teacher in one district claimed that her district's standards "are on the wall in every classroom" and said that "our jobs as teachers are linked to these standards." However, the other teacher interviewed *at the same school* said, "As for the district standards, I'm a new teacher and not aware of what they are exactly." A third teacher in this district

(but at a different school) mentioned that teachers were required to provide evidence that they met standards. Yet another teacher in the district said that they hadn't even *received* the standards. Not every district yielded quite this level of contradictory information, but, by and large, there was not a great deal of consistency in remarks regarding standards.

Given the lack of consistency and the high level of confusion, it is not surprising that overall, direct impact of the standards on curriculum and instruction appeared to be relatively low, or, at best, somewhat superficial in most of the districts visited. Although several teachers did say that they follow — or try to follow — standards in their teaching, many other teachers interviewed did not mention standards at all or mentioned them only minimally.[4] For example, when asked "How do you decide what mathematics to teach?" the majority of teachers did not mention standards. One of the more common responses was along the lines of "I follow the textbook." To the extent that textbooks are aligned with standards, then, instruction also may be aligned with the standards, but alignment of the text with the standards cannot be assumed. (This will be discussed further in the following section.)

A few teachers suggested that the standards (district or state) "did not apply" to them or to their students, for one reason or another (for example, teachers of special education or experimental courses). Other teachers mentioned that they were aware that standards existed, but that they had not read them or did not use them systematically.

District Spotlight: Mathematics Content Standards That Matter

In one of the eight districts where school-level visits occurred, the district's content standards have clearly exercised a powerful effect on schools and teachers. Every teacher interviewed in this district (6 total) talked about the content standards and the impact of the standards on curriculum and instruction. For example, when asked, "How do you decide what mathematics to teach?" standards figured prominently in the answers of five of the six teachers, and the sixth teacher implied the same in the answers to other interview questions.

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[4] Several teachers who did not mention district "standards" *per se* did mention other district curriculum guidelines such as scope-and-sequence documents, timelines, benchmarks, or checklists. (Such comments were particularly frequent in two of the eight districts.) To some extent, the documents mentioned may resemble or serve some of the same purposes as content standards; one teacher said that the district scope and sequence gave "expectations for each grade level." Another teacher remarked that a district timeline essentially tells him "what to teach at what time to make it through the year, or what they expect to be covered by such-and-such a time throughout the year."

District Spotlight — continued

The principals at the schools in this district also had a very high level of awareness of the standards. At one school, the principal said she thought that mathematics instruction was "clearly being driven by [district] standards" and mentioned that her school is piloting the new district report card, which focuses heavily on reading and mathematics standards. Another principal stated that curriculum is "absolutely dictated" by the district-developed standards, although teachers "have freedom" in how to teach them. She also mentioned that she thought the standards had helped with student achievement by allowing teachers to clearly communicate to parents where their children were and where they needed to go.

A principal at a third school in the district also commented that she thought the standards had had a major positive impact and made a direct difference in the classroom. She indicated that standards help her "talk to teachers," since she can better see what teachers are covering and what they should be covering, and she thinks that standards set up a positive atmosphere of peer pressure to produce good outcomes. She reported that all students have copies of the standards in their binders, and teachers link back to them during lessons. The classroom observer did not directly confirm this, although in a different school in the same district, the observer noted an explicit emphasis on standards and teaching to them. According to the observer, the teacher referred to the standards when describing what he was doing and why he was doing it. Additionally, the teacher had all the standards printed and laminated, and had them hanging on the wall, covering at least an eighth of the wall space.

A district administrator commented that overall, the standards had had a very positive impact on instruction; he thought that one of the consequences of the standards and assessment system has been increased consistency and focus in the classroom. He also remarked that the standards have sparked a district-wide discussion about what should be taught, how it should be assessed, and what an acceptable level of performance was. Moreover, he reported an increased continuity in content and in expectations. He did, however, note that while elementary schools have been highly committed to the standards, the response has been somewhat weaker in the middle and high schools.

Although neither district-level nor school-level interview protocols explicitly asked for opinions about the state standards, some interviewees did volunteer such opinions. A few were positive. For example, one district-level administrator said he thought that the state standards were more useful than the district standards because they were more specific. And a teacher in a different district commented, "The state standards have had the most impact on me — they give me direction."

Most comments, however, were less positive. Several districts felt that the state standards are unrealistic — that they cover too much material, include irrelevant material, or are not grade-level appropriate. This was true of both small rural districts and large urban districts.

For example, in an interview in a small district that adopted the state standards without modification, a district-level official reported that the teachers are overwhelmed by the amount of material they have to cover and feel unable to teach all of it to mastery. In another district, district-level administrators indicated that teachers, particularly at the middle school level, felt that the state standards wouldn't fit into the timeframe of the school year and that some of the items were not important.

That middle school teachers were concerned about the state standards was supported by findings from the school-level interviews done in conjunction with the Mathematics Implementation Study. A particular concern, spanning several districts, was eighth-grade algebra. "I don't understand the push," said one teacher. "Cognitively, they [students] are not ready. They just don't understand it." A teacher in a different district stated, "The state standards say that algebra should be taught to all eighth graders, I'm against it. I think it's a maturity issue. Not all kids are ready. It's too abstract for some." Another teacher mentioned being "skeptical" about eighth-grade algebra, and a principal remarked that many middle school teachers have never taught algebra before and "are nervous."

Despite these concerns, however, the large number of comments made about eighth-grade algebra — by principals and by teachers as well as by district personnel — made it clear that several districts are, in fact, preparing to implement it. As one principal put it, "I don't believe all eighth graders, and definitely not all seventh graders, are developmentally ready for algebra. However, the district has required the change. We will offer support for students during the year in the form of math lab and study club."

Alignment with Curriculum and Professional Development

> *The standards with aligned training and assessments has provided the framework for meaningful collaboration in grade levels at the school sites and developed a common language district-wide that is being communicated to students and parents.*
>
> *—District Survey Response*

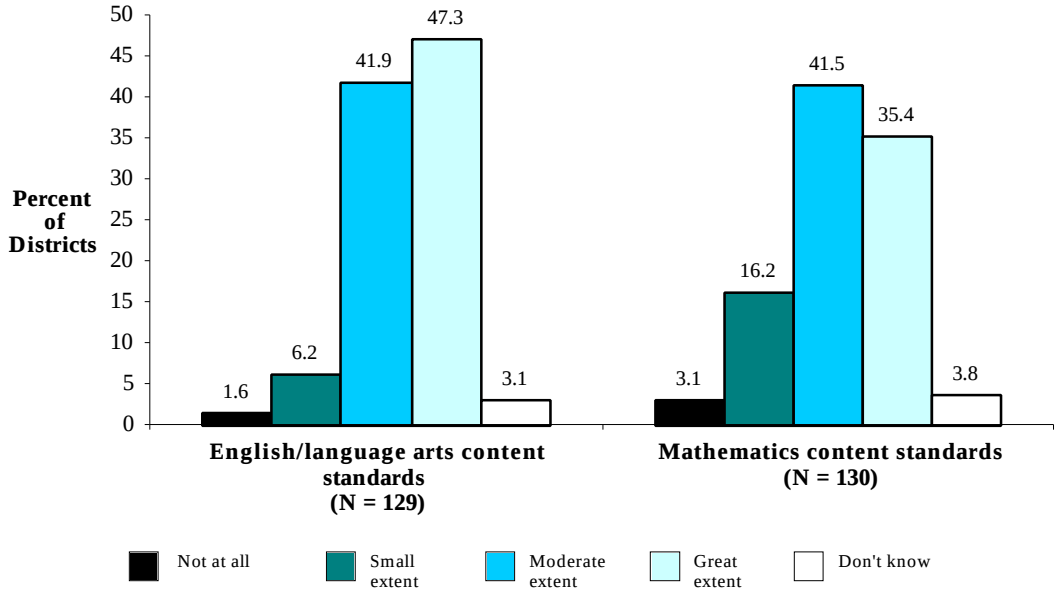
♦ Alignment of curriculum with content standards lags behind standards adoption.

When asked to rate the extent to which district-adopted instructional materials are aligned with district content standards, less than half of survey respondents (for both subject areas) indicated a "great" level of alignment, but about 40 percent indicated a "moderate" level of alignment, giving an overall rosy impression. (See Figure 6.4.) District and school-level

interviews indicated that alignment of standards with curriculum is an ongoing process, with some districts much farther along than others.

Figure 6.4

District Reporting of Alignment of Instructional Materials to Content Standards for English / Language Arts and Mathematics



In one small district, for example, an administrator mentioned that the district is in the process of developing curriculum to match the standards, and they had just purchased a curriculum software package that will allow them to review and modify the entire curriculum every two years. Teachers are told what to cover and given specific objectives and goals, but they can use whatever methodologies they please.

In a medium-sized district, the district administrators who were interviewed noted that curriculum is more aligned with standards in language arts than in math. Alignment is still in process, and, in the opinion of one administrator, it would be helped immeasurably if there were a full-time curriculum coordinator.

At the school level, current efforts to align curriculum and instruction with standards stemmed from districts, principals, and teachers. One principal, for example, spoke of how they had looked at the district standards and at the SAT-9 "to determine curriculum," and they were now planning to "break it down by quarter." A math teacher in a different district remarked:

I have modified some of my teaching style to fit what the standards are saying….There's definitely standards that are being put in place and things of that nature that have influenced my teaching….They come straight from the district. Like, the principal goes to a district meeting. And she comes back, and she says, "Okay, here's what's going on."…. Like for example, at the beginning of the school year, I'm a math teacher, and so I didn't do a whole lot of writing in my class. Well, now I do tons of writing in my class, because that's part of the standard now: "Students will be able to learn to read and write across the curriculum."

This teacher, however, was also one of the teachers who said that he decided what to teach by following the book.

Indeed, curriculum materials drive the curriculum in some districts. As discussed above, many math teachers reported that curriculum materials — namely, the textbook — play the primary role in determining the content of instruction. Thus, to the extent that curriculum materials are aligned with the standards, and instruction follows the curriculum materials, then instruction is aligned with the standards. As one district administrator put it, the district had aligned its standards with the state standards, and thus instructional materials are aligned with the standards to the extent that the state-adopted materials are so aligned. And some interviewees did indicate such alignment:

[From a principal] The state framework determines the curriculum. As for the text, the principal and teachers look at the state approved books to try and meet the standards which state that by a particular age, a student must have mastery of specific skills….The school has full discretion over pacing, but we need to meet the standards.

[From a teacher] The district math standards are pretty much aligned with the book we use. They went through that whole process when they chose the book, back, like, two years ago. From what I understand — I wasn't here…. The curriculum is pretty well laid out. They tell you what concepts need to be done; you don't have to do it exactly the way it is in the book, but that's basically what you've gotta teach.

The principal at this teacher's school, however, did not take it as a given that following the district-adopted text ensured coverage of the standards. She stated:

The district is attempting to align the math standards with curriculum….Our major job next year is to align curriculum, see if we're achieving the standards, and understand what the assessments show about changes that need to be made….Our priorities are to align curriculum to standards and to do a quarterly assessment here so that the goals are set for each grade level in math.

Moreover, it cannot always be assumed that curriculum materials are aligned with the standards — especially given conflicting sets of standards. A math teacher in one district stated:

> *This year we made the transition to an algebra curriculum for eighth grade that is different than traditional algebra. This was supposed to be the transition year. Now, these books…have not been adopted by the district. They follow the old state standards and the NCTM standards, but they don't address the new state standards.*

Another teacher lamented similarly, "Math standards keep changing and how can we get a curriculum to match when it's always changing?" Yet another teacher commented that what would most help her improve her mathematics instruction would be more time and "curriculum aligned to standards." And a third teacher felt that that not enough attention was given by the school to curriculum implementation. "It would mean more meetings," she continued. Finally, one teacher stated, "I think we need to align our curriculum with the state standards because they are aligned with the SAT-9." This remark hints at the power of the SAT-9 in driving curriculum, to be discussed further in the following chapter.

District Spotlight: Aligning Math Standards with Curriculum

School-level comments about alignment of math curriculum with standards were particularly prominent in one of the eight districts visited (not, interestingly, the same district profiled above in which standards figured so prominently in interview responses). Principals and teachers at three out of the four schools visited in this district mentioned alignment efforts.

At the first school, the principal said that at the beginning of the year, the faculty had discussed the district mathematics standards and grade-level teams met to decide the goals and objectives for the year based upon the appropriate standards. They created a yearlong plan to address all of the standards, and teachers continue to work in grade level teams to plan how to meet the standards. A teacher at this school confirmed independently that the fourth-grade teachers had, indeed, met as a group to align their curriculum to the district standards.

At the second school in this district, the principal spoke of how "Standards are the basis now in the school and in the district" and stated that "the present school effort is to align curriculum to standards." (She said that the school follows the direction of the district inasmuch as the district selects the text and adopts the standards, but the school itself develops the "course of study.") A teacher at this school, meanwhile, discussed how the teachers had been "mapping" district standards to curriculum, resources, and practices. She implied that this had been a district-wide activity.

(continues)

District Spotlight — continued

The principal at the third school discussed alignment between professional development efforts and the standards, explaining that the school has an outside consultant who comes in on a monthly basis to demonstrate how to use materials and "how the materials correspond to the district standards." The relationship between the consultant and the content standards was not mentioned by the teachers at this school, but one of the teachers did discuss how, using the district and state standards as a guide, the math teachers had met and "made a list of priorities" for teaching mathematics. She said that this had been a "useful discussion" and that they had "shared methods."

- **Almost all districts report that they require teachers to engage in professional development based on their content standards, with the most common being one to three days in a given year.**

Along with curriculum, professional development is another area requiring alignment with content standards if they are going to have a meaningful impact on classroom instruction. On the survey, about 25 percent of districts reported that in a given year, they require more than three days of standards-related professional development for teachers. (One respondent noted, "Lately all days have been related to this.") On the other end of the continuum, roughly 20 percent of districts said that they require less than one day. About 50 percent of responding districts required one to three days.

Neither district nor school-level interviews focused on standards-related professional development, but, again, some interviewees did volunteer information. In one large district, a district administrator mentioned that all district-provided professional development is based on the standards. In a small district, a district administrator remarked that they had gone over the standards in staff and faculty meetings so that everyone was familiar with them. In addition, the standards were explained to parents in site councils.

In the Next Chapter

Content standards constitute one of the six key elements of an accountability system, and districts were making good progress in this area, as this chapter has shown. But if content standards are not being taught, they are an irrelevant, empty shell. Standards-aligned assessments are needed and they are the topic of the next chapter.