



A Union of Professionals

AFT Teachers

Process

Content

Sizing Up
State
Standards 2008





Edward J. McElroy, President

Nat LaCour, Secretary-Treasurer

Antonia Cortese, Executive Vice President

Copyright © American Federation of Teachers, AFL-CIO (AFT) 2008. Permission is hereby granted to AFT state and local affiliates to reproduce and distribute copies of this work for nonprofit educational purposes, provided that copies are distributed at or below cost, and that the author, source and copyright notice are included on each copy. Any distribution of such materials by third parties who are outside of the AFT or its affiliates is prohibited without first receiving the express written permission of the AFT.

Cover illustration © Michael Gibbs.

Introduction

Today, testing and accountability, instead of curriculum and instruction, have taken center stage in schools and classrooms across the country. As more accountability provisions are piled on schools, staff and students, attention has shifted away from what kids should be learning, and moved toward test scores and their implications. However, what seems to have been forgotten is that student achievement and test scores are a reflection of what is taught in the classroom.

The AFT has long been an advocate for common, coherent content standards, which ensure that all children, regardless of neighborhood, are exposed to rich, well-sequenced content and skills, starting in kindergarten or before. We know that shallow, overly broad standards fail to address students' basic skills, but it is also clear that increased assessment requirements have squeezed music, the arts, history and other nontested subjects out of the curriculum. Now, more than ever, states must develop common, coherent, grade-by-grade standards.

Common, coherent, grade-by-grade standards are an important professional tool.

When standards are neither too vague nor overly prescriptive, they enhance teaching and learning. Common, coherent standards:

- Allow teachers and parents to get a good sense of what students are expected to know and be able to do at any specific grade level.
- Help teachers identify which students are having difficulty and need extra help.
- Allow teachers to develop, share and refine best practices with their colleagues, and ensure that professional development is based on what teachers actually teach, not pedagogical fads.
- Ensure that transient students won't suffer from a new curriculum every time they switch schools.
- Guarantee that all students are exposed systematically to the knowledge and skills they need, without risking unproductive repetition or lack of exposure to key topics.
- Enable teachers to prepare their students for state assessments without drill and kill.

Common, coherent, grade-by-grade standards promote effective professional development opportunities. Research strongly suggests that when professional development is pegged to the standards and curriculum being taught (instead of geared toward generic skills), it is more effective—and the effects are seen in student achievement. Plus, a shared understanding of what students should know and be able to do enables the best kind of professional development: collegial efforts to share best practices and to overcome common teaching challenges.

Since 1995, the American Federation of Teachers has judged state content standards on their clarity and specificity. We continue that tradition with our latest review of state efforts to develop rich, common, coherent standards in the four core content areas (English, math, science and social studies).

What We Looked For

In brief, content standards are at the heart of a coherent standards-based education system. They define our expectations for what’s important for children to learn, serve as guideposts for curriculum and instruction, and should be the basis of all assessments—whether formal, informal, state-developed or teacher-created. These state-developed public documents are consulted by teachers, parents and the general public when they want to understand content-matter expectations.

Content standards should exist for every single grade, kindergarten through high school, in every subject. Grade-by-grade content standards increase the likelihood that all students are exposed to a rigorous, sequenced curriculum that is consistent across grades, schools and school districts. Grade-specific standards also facilitate greater alignment of standards-based curriculum, assessments, textbooks, professional development and instruction. States that organize their standards grade by grade are best able to specify what students should learn and when they should learn it. Unfortunately, the quality of content standards varies enormously from state to state, subject to subject and grade to grade. Standards can be full of empty rhetoric, unclear and devoid of content. They can be so vast and scattered that no teacher could prepare a student to meet them in the course of a school year. If they are too vague, teachers and test developers can’t hope to focus on the same materials. If they are too narrow, they constrict the curriculum. If they are too long and/or fail to make priorities clear, teachers end up in a guessing game as to what to teach—and test developers end up guessing what to assess. The quality of content standards matters greatly to the inter-related functions of teaching and learning, as well as to the fairness of tests and the accountability systems they support.

The Criteria

We examined each state’s and Washington, D.C.’s content standards documents to determine whether or not they contain enough information about what students should learn to provide the basis for coherent curricula and assessments. There is no perfect formula for this; we made a series of judgment calls based on a set of criteria. To be judged “strong,” a state’s content standards must:

- Be detailed and explicit with little or no repetition, and rooted firmly enough in the content of the subject area to lead to a common, knowledge-rich curriculum.
- Contain particular content:
 - English standards must cover reading basics (e.g., word attack skills, vocabulary), reading comprehension (e.g., exposure to a variety of literary genres), writing conventions (e.g., spelling, writing mechanics) and writing forms (e.g., narrative, persuasive, expository).
 - Math standards must cover number sense and operations, measurement, geometry, data analysis and probability, and algebra and functions.
 - Science standards must cover earth, physical and life sciences.
 - Social studies standards must cover specific content in U.S. history, world history and civics.
- Provide attention to both content and skills.
- Be articulated for every grade from K-8 and by grade or course at the high school level.

In general, strong content standards provide clear guidance to teachers, curriculum and assessment developers, textbook publishers and others, so that one person's interpretation of the central knowledge and skills students should learn at a particular grade will be comparable to someone else's. Table 1 presents examples of state standards that meet and do not meet the AFT's criteria.

What We Examined

We examined only those documents that states posted on their Web sites as of October 2007 and referred to as the state content standards (see Appendix B). In our findings, we report on each state's standards by level (i.e., elementary, middle and high school). To be judged as having strong content standards at any particular level, a state had to meet our criteria for strong content standards in more than half of the grades associated with that level. In order to have strong elementary standards, at least four of the six grades (grades K-5) had to meet the AFT criteria; at the middle level (grades 6-8), at least two grades had to meet our criteria; and at the high school level (grades 9-12), more than 50 percent of the required standards/courses needed for graduation had to meet our criteria.

Table 1: Examples of strong and weak content standards

	STRONG STANDARDS	WEAK STANDARDS
ENGLISH	Distinguish between cause and effect and between fact and opinion in informational text. Example: In reading an article about how Snowshoe rabbits change color, distinguish facts (such as <i>Snowshoe rabbits change color from brown to white in the winter</i>) from opinions (such as <i>Snowshoe rabbits are very pretty animals because they can change colors</i>). (Grade 4)	Demonstrate the understanding that the purposes of experiencing literary works include personal satisfaction and development of lifelong literature appreciation. (Grade 4)
MATH	Understand how real and complex numbers are related, including plotting complex numbers as points in the plane. Example: Plot the points corresponding to $3-2i$ and $1+4i$. Add these complex numbers and plot the result. How is this point related to the other two? (Algebra II)	Model and analyze real-world situations by using patterns and functions. (Grades 9-12)
SCIENCE	Describe how groups of elements can be classified based on similar properties, including highly reactive metals, less reactive metals, highly reactive nonmetals, less reactive nonmetals, and some almost completely nonreactive gases. (Grade 8)	Describe the historical and cultural conditions at the time of an invention or discovery, and analyze the societal impacts of that invention. (Grades 5-8)
SOCIAL STUDIES	Evaluate the significance of the presidential and congressional election of 1800 and the transfer of political authority and power to the Democratic-Republican party led by the new president, Thomas Jefferson (1801). (Grade 8)	Identify significant events and people and important democratic values (e.g., freedom, equality, privacy) in the major eras/civilizations of state, American Indian, United States, and world history. (Grade 8)

What We Found

Only one state, Virginia, meets the AFT criteria for strong standards in all levels and subjects. While some states have a lot of work ahead of them, others only have to focus on a few grades in one subject area (see Table 2). For a breakdown of how each state did in our review, see Appendix A.

Percentage	States
0%	Colorado, Illinois, Iowa, Montana, Nebraska, Pennsylvania, Wisconsin
1-24%	Maine, New Hampshire, New Jersey, Rhode Island, Vermont, Wyoming
25-49%	Alaska, Idaho, Kansas, Kentucky, Minnesota, Nevada, Oregon, Washington
50-74%	Arizona, Connecticut, Delaware, Florida, Hawaii, Maryland, Massachusetts, Mississippi, Missouri, New Mexico, North Dakota, South Dakota, Texas, Utah
75-99%	Alabama, Arkansas, California, Georgia, Indiana, Louisiana, Michigan, New York, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Washington, D.C., West Virginia
100%	Virginia

States continue to do a better job with their math and science standards. Since the AFT's first review of standards in 1995, states have consistently done a better job developing strong math and science standards than English or social studies standards. In our current review, 24 states have strong math standards and 22 have strong science standards. However, only eight states have strong English standards at all levels, and only two states have strong social studies standards at all levels (see Table 3).

Subject Area	States
ENGLISH	Georgia, Indiana, New Mexico, New York, North Carolina, Tennessee, Virginia, Washington, D.C.
MATH	Alabama, Alaska, Arkansas, California, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Louisiana, Maryland, Mississippi, New York, North Carolina, Ohio, Oklahoma, South Carolina, South Dakota, Texas, Utah, Virginia, Washington, D.C., West Virginia
SCIENCE	Alabama, Arkansas, California, Connecticut, Delaware, Georgia, Hawaii, Indiana, Louisiana, Maryland, Michigan, Mississippi, Missouri, North Carolina, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Virginia, Washington, D.C., West Virginia
SOCIAL STUDIES	Massachusetts, Virginia

The quality of the standards also varies by level. When we took a closer look at the standards, we found that for most subjects, the middle level standards are the strongest, while the high school level standards are the weakest (see Table 4). The weaknesses at the high school level are, in many cases, due to the high school standards being clustered (e.g., one set of standards for grades 9-12) instead of being grade- or course-specific.

Table 4: Percentage of clear, specific, content-rich standards by school level			
	% OF ELEMENTARY LEVEL STANDARDS THAT ARE STRONG	% OF MIDDLE LEVEL STANDARDS THAT ARE STRONG	% OF HIGH SCHOOL LEVEL STANDARDS THAT ARE STRONG
ENGLISH	47	31	25
MATH	78	84	47
SCIENCE	53	63	53
SOCIAL STUDIES	6	45	43

Standards that failed to meet our criteria did so for three main reasons: They were repeated, clustered, or had missing or vague content. All three of these problems have the same, terrible consequences: Teachers do not have a common understanding of what students should have learned in the previous grade, what they are expected to master in the current grade, or what they are preparing them to learn in the following grade. (This problem can extend to textbook writers, professional development providers and assessment developers as well.)

So how do the failing standards break out? A number of states received poor ratings for their **English** standards because of significant repetition from grade to grade. Thirty-five percent of elementary school English standards (grades K-5), 41 percent of middle school English standards (grades 6-8) and 24 percent of high school English standards (grades 9-12) simply repeat more than 50 percent of their standards from grade to grade. Repeated standards have the same problem as clustered standards: Teachers have no clear understanding of what students should have learned, are learning, and will be learning.

More than three-quarters (78 percent) of **math** standards that did not meet our criteria were clustered; an additional 13 percent simply repeated the same standards from grade to grade and 9 percent were vague.

The vast majority of science standards that did not meet our criteria had clustered standards: 87 percent of science failures were due to clustered standards; an additional 10 percent were due to missing or vague content.

In social studies, the failures were more evenly distributed between clustering and missing or vague content: 58 percent of social studies failures were due to the standards being clustered; 39 percent of failures were due to missing or vague content.

Through our analysis we also found that too many states have clustered K-2 standards or have chosen not to write them at all. In fact, *nine states have clustered or no standards for K-2 in the crucial areas of literacy and numeracy.* This is a serious problem that states must address because specific, coherent, grade-by-grade standards at the early grades are essential to building students’ background knowledge and vocabulary. They can help ensure that all kids enter middle school ready to comprehend challenging material. Knowledge-rich K-2 standards are especially vital for children from low-income families who, on average, have been exposed to roughly 30 million fewer words than children from professional families—and whose “word and world knowledge” is, therefore, substantially less than that of their peers.

What States Should Do

- **Develop grade-by-grade standards that are explicit.** Too many states only write standards for those grades and subjects that are assessed by the state. Yes, state tests must reflect the content found in the standards. But as any teacher or student can attest, there is more to teaching and learning than the state test. In addition, tests are not measuring the knowledge gained in any single grade. Knowledge is cumulative. For students to do well on the fourth-grade math test, for example, they had to have mastered certain content and skills in grades K-3. Clearly, the existence of standards should not be contingent on a state test. Instead, it is imperative that administrators, teachers, parents and students know what all students should be learning, regardless of how—or even if—the content and skills are measured by a state assessment.
- **Bring specific United States and world history into their early elementary standards.** Currently, only three states bring specific United States and world history into their early elementary standards (Arizona, Massachusetts and Virginia). Most states wait to bring in U.S. history specifically at grade 4 and world history specifically at grade 5. And, in too many instances, world history is included in the context of U.S. history only. Ultimately, this means students learn about other nations through U.S. exploration (e.g., Christopher Columbus and Spain) or through conflicts (e.g., Japan’s role in World War II, U.S. and Vietnam during the Vietnam War). This practice is most prevalent at the elementary level; however, a few states also do this at the middle and high school levels.
- **Describe what high school students should know and be able to do by course.** The reality of high school is that students enroll in courses, not grade-specific subjects. In other words, students are enrolling in U.S. History from 1877 and not in Social Studies 11. Standards should reflect the reality of how high schools function. States that have grade-by-grade high school standards have made a positive first step in defining what high school students should learn. But those grade-by-grade standards are not comparable to the coursework high school students are taking, and are, therefore, of little use to teachers, professional development providers, textbook writers and assessment designers.

In addition, too many high school standards are clustered, meaning one set of standards applies to more than one grade (e.g., grades 9-10, 9-11, or even 9-12). Forty-seven percent of high school English and math standards, and 45 percent of high school science and social studies standards are clustered. In these states, there is no clear understanding of what students are expected to learn throughout their high school years.

Finally, too many states have graduation requirements that don’t complement or reflect their standards. For example, a state may require Algebra I to graduate from high school, but may not have Algebra I standards. Or, a state may require four years of English, but only provide one set of standards to cover all grades 9-12.

- **Provide instructional guidance and teacher resources to help teachers bring the standards into the classroom.** It isn’t enough to develop a strong set of standards.

There must be an understanding of what the standards mean, and the concepts and skills necessary for students to demonstrate mastery of them. Teachers should have access to detailed guides that explain the content to be taught, offer ideas for how to present the material to students, show sample student responses that demonstrate differing levels of performance on the standards and include sample classroom assessments. Such guides would be helpful not only to teachers, but also to teacher preparation organizations, professional development providers, textbook writers and state assessment developers.

By addressing these four areas, we believe that states can strengthen their standards and make them more meaningful to teachers, students, curriculum developers, test designers, textbook writers and professional development providers. The good news is that states don't have to start from scratch. Instead they can learn from each other. Table 5 lists those states with what we've identified as "model" standards in each of the four core areas we reviewed and at various grade levels. These standards are clear, specific and grounded in content, and would be a useful reference for any state looking to strengthen their own standards. Finally, we've also identified standards documents that include more elaboration or instructional guidance to help teachers deliver the standards in their classrooms.

A strong education system must begin with strong standards. However, it is important to remember that standards alone—no matter how strong—do not provide the common ground that educators and students need. An effective education system must include curricula and assessments aligned to the standards, professional development for teachers, help for children struggling to meet the standards and policies that make meeting the standards count. States also need to develop all of these components in an ordered and systemic fashion. Imposing consequences without having an aligned curriculum, teacher preparation and adequate resources is a sure recipe for disaster. Administering tests disconnected from a state's standards and curriculum can only lead to student failure and widespread discontent, potentially undermining support for public education.

Ultimately, state officials must ask themselves: Do students in district X cover the same content and skills, at the same depth of understanding, as students in district Y?

Table 5: Model standards documents	
SUBJECT	STATE
English—K-12	Indiana
Math—K-12	Indiana, Ohio
Science—K-12	Delaware, Ohio
Science—High School	Indiana, Michigan
Science—High School Biology	Arkansas
Social Studies—K-5	Arizona
Social Studies—High School	Indiana, Massachusetts
Clarifying Language & Instructional Guidance	South Dakota (Math and Science), Utah (Math)

If the answer is “no” or “I don’t know,” then more work is needed to ensure that all students—regardless of socioeconomic status or where they live in the state—are given opportunities to learn and ultimately master the content standards. This process must start with strong content standards that reflect the qualities discussed throughout this brief.

If we want students to have a deeper understanding of important topics, then we need to ensure that they have opportunities in the classroom to delve deeper into various concepts and skills. This is not possible in the current environment, which requires teachers to spend endless hours on test preparation and teaching-to-the-test activities. Now more than ever, the need for common, content-rich standards has become essential.

Appendix A—Which Standards Met AFT’s Criteria for Clarity, Specificity, and Content?

E = ELEMENTARY LEVEL M = MIDDLE LEVEL H = HIGH SCHOOL LEVEL	ENGLISH			MATH			SCIENCE			SOCIAL STUDIES		
	E	M	H	E	M	H	E	M	H	E	M	H
ALABAMA	○	○	●	●	●	●	●	●	●	○	●	●
ALASKA	○	○	○	●	●	●	○	●	●	○	○	○
ARIZONA	●	○	○	●	●	○	●	●	○	●	●	○
ARKANSAS	●	○	●	●	●	●	●	●	●	○	●	●
CALIFORNIA	●	●	○	●	●	●	●	●	●	○	●	●
COLORADO	○	○	○	○	○	○	○	○	○	○	○	○
CONNECTICUT	●	●	○	●	●	○	●	●	●	○	○	○
DELAWARE	○	○	○	●	●	●	●	●	●	○	○	○
FLORIDA	●	●	○	●	●	●	○	●	○	○	○	○
GEORGIA	●	●	●	●	●	●	●	●	●	○	●	●
HAWAII	○	○	○	●	●	●	●	●	●	○	●	●
IDAHO	○	○	○	●	●	●	●	●	○	○	○	○
ILLINOIS	○	○	○	○	○	○	○	○	○	○	○	○
INDIANA	●	●	●	●	●	●	●	●	●	○	●	●
IOWA	○	○	○	○	○	○	○	○	○	○	○	○
KANSAS	○	○	○	●	●	○	○	○	○	○	●	●
KENTUCKY	○	○	○	○	●	○	○	●	○	○	○	●
LOUISIANA	●	●	○	●	●	●	●	●	●	○	●	●
MAINE	○	○	○	○	●	○	○	○	○	○	○	○
MARYLAND	○	○	○	●	●	●	●	●	●	○	●	○
MASSACHUSETTS	○	○	○	●	●	○	○	○	●	●	●	●
MICHIGAN	●	●	○	●	●	○	●	●	●	○	●	●
MINNESOTA	○	○	○	●	●	○	●	●	○	○	○	○
MISSISSIPPI	●	○	○	●	●	●	●	●	●	○	○	○
MISSOURI	○	○	○	●	●	○	●	●	●	○	●	○
MONTANA	○	○	○	○	○	○	○	○	○	○	○	○
NEBRASKA	○	○	○	○	○	○	○	○	○	○	○	○
NEVADA	●	●	○	●	●	○	○	○	○	○	○	○
NEW HAMPSHIRE	○	○	○	●	●	○	○	○	○	○	○	○
NEW JERSEY	●	○	○	○	●	○	○	○	○	○	○	○
NEW MEXICO	●	●	●	●	●	○	●	●	○	○	●	○
NEW YORK	●	●	●	●	●	●	○	○	●	○	●	●
NORTH CAROLINA	●	●	●	●	●	●	●	●	●	○	○	●
NORTH DAKOTA	○	○	●	●	●	○	●	●	○	○	●	○
OHIO	●	○	○	●	●	●	●	●	●	○	●	●
OKLAHOMA	●	●	○	●	●	●	●	●	●	○	○	●
OREGON	●	○	○	●	●	○	○	○	○	○	○	○
PENNSYLVANIA	○	○	○	○	○	○	○	○	○	○	○	○
RHODE ISLAND	○	○	○	●	●	○	○	○	○	○	○	○
SOUTH CAROLINA	●	○	○	●	●	●	●	●	●	○	●	●
SOUTH DAKOTA	○	○	○	●	●	●	●	●	●	○	●	●
TENNESSEE	●	●	●	●	●	○	●	●	●	○	●	○
TEXAS	○	○	○	●	●	●	○	●	●	○	○	●
UTAH	○	○	●	●	●	●	○	●	●	○	●	●
VERMONT	○	○	○	●	●	○	○	○	○	○	○	○
VIRGINIA	●	●	●	●	●	●	●	●	●	●	●	●
WASHINGTON	●	○	○	●	●	○	○	○	○	○	○	○
WASHINGTON, D.C.	●	●	●	●	●	●	●	●	●	○	●	●
WEST VIRGINIA	●	○	●	●	●	●	●	●	●	○	○	●
WISCONSIN	○	○	○	○	○	○	○	○	○	○	○	○
WYOMING	○	●	○	○	○	○	○	○	○	○	○	○

● = MEETS AFT CRITERIA
○ = DOES NOT MEET AFT CRITERIA

Appendix B— Documents Reviewed

Alabama

- Course of Study – English Language Arts – 1999
- Course of Study – Math – 2003
- Course of Study – Science – 2005
- Course of Study – Social Studies – 2004

Alaska

- Alaska Standards – March 2006
- Math Performance Standards (Grade Level Expectations) For Grades K-10 – 6/10/05
- Reading Performance Standards (Grade Level Expectations) For Grades K-10 – 6/10/05
- Science Performance Standards (Grade Level Expectations) For Grades 3-11 – 6/10/05
- Writing Performance Standards (Grade Level Expectations) For Grades K-10 – 6/10/05

Arizona

- Arizona Academic Content Standards – Mathematics – 3/31/03
- Arizona Academic Content Standards – Reading – 8/12/03
- Arizona Academic Content Standards – Science – Updated 3/10/05
- Arizona Academic Content Standards – Social Studies – 9/26/05 (Updated 5/22/06)
- Arizona Academic Content Standards – Writing – 6/28/04

Arkansas

- Algebra I Mathematics Curriculum Framework – Revised 2004, Amended 2006
- American History (United States History) Social Studies Curriculum Framework – Revised 2006
- Biology Science Curriculum Framework – Revised 2005
- Civics/American Government Social Studies Curriculum Framework – Revised 2006
- Geometry Mathematics Curriculum Framework – Revised 2004, Amended 2006
- Grades 9-12 English Language Arts Curriculum Framework – Amended 2006
- Grades K-8 Social Studies Curriculum Framework – Revised 2006
- K-8 Mathematics Curriculum Framework – Revised 2004
- K-8 Science Curriculum Framework – Revised 2005
- K-12 English Language Arts Curriculum Framework – Revised 2003
- World History Social Studies Curriculum Framework – Revised 2006

California

- English Language Arts Content Standards for California Public Schools – 12/97
- History – Social Science Content Standards – 10/98
- Mathematics Content Standards for California Public Schools – 12/97
- Science Content Standards for California Public Schools – 10/98

Colorado

- Model Content Standards – Civics, Adopted 9/10/98
- Model Content Standards – History – Adopted 9/14/95
- Model Content Standards – Mathematics – Adopted 6/8/95, Amended 9/15/05
- Model Content Standards – Reading & Writing – Adopted 7/13/95
- Model Content Standards – Science – Adopted 6/8/95, Amended 2/8/07

Connecticut

- 2005 Connecticut Mathematics Curriculum Framework, Approved 9/7/05
- 2006 Connecticut English Language Arts Curriculum, Approved 2/2006
- Connecticut PreK-8 English Language Art Curriculum Standards, Draft 10/15/07
- Connecticut PreK-8 Mathematics Curriculum Standards, Draft 10/15/07
- Core Science Curriculum and Framework, 2004
- Social Studies Curriculum Framework, May 1998

Delaware

- Delaware Recommended Curriculum – Socials Studies Grade Level Expectations, 10/2006
- Math Grade-Level Expectations, 8/2006
- Science Standard 1-8 Grade-Level Expectations, 2006
- Standard 1-4 [English Language Arts] Grade-Level Expectations, 8/2006

Florida

- 2006 Sunshine State Standards – K-12 Reading and Language Arts – Approved 10/07
- Grade Level Expectations for the Sunshine State Standards – Science – Grades 3-8, no date
- Grade Level Expectations for the Sunshine State Standards – Social Studies – Grades 3-8, no date
- Mathematics Content Standards – Approved 9/18/07
- Sunshine State Standards – Science – PreK-2 and 9-12, no date
- Sunshine State Standards – Social Studies – PreK-2 and 9-12, no date

Georgia

- Biology Curriculum Revised 7/13/2006
- Chemistry Curriculum Revised 7/13/2006
- Earth Science Curriculum Approved 7/13/2006
- Eleventh- and Twelfth Grade Composition, Conventions, and Listening, Speaking, and Viewing, no dates
- English Language Arts Standards (K-8) – Revised 7/13/06
- Georgia Performance Standards for Science – K-5 Approved 7/12/2004
- Georgia Performance Standards for Science – Grade 6 Approved 7/13/06, Revised 5/31/07
- Georgia Performance Standards for Science – Grade 7 approved 7/13/2006
- Georgia Performance Standards for Science – Grade 8 Approved 7/12/2004
- Georgia Performance Standards for Social Studies – Approved 10/14/04

- Georgia Performance Standards for Social Studies – Grade 8 Revised 7/13/2006
- K-12 Mathematics Georgia Performance Standards – 8/12/2006
- Ninth-Grade and Tenth Grade Literature and Composition, no dates
- Physical Science Curriculum 7/13/2006
- Physics Curriculum 7/13/2006

Hawaii

- Hawaii Content and Performance Standard for Language Arts K-12 – August 2005
- Hawaii Content and Performance Standards for Mathematics – August 2005
- Hawaii Content and Performance Standards for Science – August 2005
- Hawaii Content and Performance Standards for Social Studies K-12 – August 2005

Idaho

- Idaho Content Standards – Language Arts – 4/24/06
- Idaho Content Standards – Mathematics – 4/24/06
- Idaho Content Standards – Science – 4/24/06
- Idaho Content Standards – Social Studies – 4/24/06

Illinois

- Illinois Learning Standards – English Language Arts, Mathematics, Science, Social Science – no date
- Performance Descriptors – English Language Arts, Mathematics, Science, Social Science – 2002

Indiana

- Indiana's Academic Standards – Teacher Edition – English/Language Arts – Adopted 6/2006
- Indiana's Academic Standards – Teacher Edition – Mathematics – Adopted 9/2000
- Indiana's Academic Standards – Teacher Edition – Science – Adopted 11/2000
- Indiana's Academic Standards – Teacher Edition – Social Studies – Adopted 8/2001

Iowa

- Grade-Level Indicators corresponding to the Iowa Tests for Grades 3-12 – no date

Kansas

- Curricular Standards for Reading – 7/8/2003
- Curricular Standards for Writing – 11/2004
- Kansas Curricular Standards for Mathematics – Revised 7/2003 and 1/31/2004
- Kansas Science Education Standards – Adopted Feb 2007, Revised Aug 2007
- Kansas Standards for History and Government; Economics and Geography – Approved 12/2004, revised 8/22/2005

Kentucky

- Core Content for Reading Assessment – Version 4.1 – 08/2006
- Core Content for Mathematics Assessment – Version 4.1 – 08/2006
- Core Content for Science Assessment – Version 4.1 – 08/2006

- Core Content for Social Studies Assessment – Version 4.1 – 08/2006
- Core Content for Writing Assessment – Version 4.1 – 08/2006

Louisiana

- English Language Arts Grade-Level Expectations – no date
- Mathematics Grade-Level Expectations – no date
- Science Grade-Level Expectations – no date
- Social Studies Grade-Level Expectations – no date

Maine

- Chapter 132 – Learning Results: Parameters for Essential Instruction – 2007 [English Language Arts, Math, Science, Social Studies]

Maryland

- Core Learning Goals: Earth/Space Science (07/2002), Physics (1/17/03), Chemistry (3/20/03)
- High School Core Learning Goals – English – Updated 08/2004
- Voluntary State Curriculum – Algebra/Data Analysis, Algebra II, Geometry – Draft 06/2007
- Voluntary State Curriculum – Biology – 7/11/07
- Voluntary State Curriculum – Mathematics PreK-3, 3-8 – 06/2004
- Voluntary State Curriculum – Reading/ELA PreK-3 – 7/8/2004
- Voluntary State Curriculum – Reading/ELA Grades 3-8 – 2/01/06
- Voluntary State Curriculum – Science PreK-3 and 3-8 – 5/2005
- Voluntary State Curriculum – Social Studies (PreK-3, 3-8, High School American Government) – 2006
- Voluntary State Curriculum – Social Studies (U.S. History) – 2/27/2006 Draft

Massachusetts

- Massachusetts English Language Arts Curriculum Framework – 06/2001
- Massachusetts History and Social Science Curriculum Framework – 08/2003
- Massachusetts Mathematics Curriculum Framework – 11/2000
- Supplement to the Massachusetts Curriculum Framework – Grade 3, 5 and 7 – 05/2004
- Supplement to the Massachusetts English Language Arts Curriculum Framework – Grades 3, 5 and 7 – 05/2004
- Massachusetts Science and Technology/Engineering Curriculum Framework – 10/2006

Michigan

- High School Content Expectations – English Language Arts – 04/2006
- English Language Arts Grade Level Content Expectations v. 12.05
- Mathematics Grade Level Content Expectations – v. 12.05; High School Content Expectations – 05/2006
- Science v. 4.07 – Grade Level Expectations; High School Content Expectations – Essential

Science, Physics, Earth Science, Biology, Chemistry – 10/2006

- Social Studies Grade Level Content Expectations – Grades K-8 – Draft 10/2007; High School Content Expectations – Social Studies – 10/2007

Minnesota

- Minnesota Academic Standards – Language Arts K-12 – 5/19/03
- Minnesota Academic Standards in History and Social Studies – 5/15/04
- Minnesota Academic Standards – Science K-12 – 12/19/03
- Minnesota K-12 Academic Standards in Mathematics – 4/14/07 Revision

Mississippi

- 2004 Mississippi Social Studies Framework and Guide – 2004
- 2007 Mississippi Mathematics Framework – REVISED
- Mississippi Language Arts Framework – 2006
- Mississippi Science Framework – 2001

Missouri

- Communication Arts Grade Level Expectations – Draft 7/20/07
- Grade-Level Expectations – Science K-8 – 4/22/05
- Mathematics Grade and Course Level Expectations – DRAFT 8/17/2007
- Science Course Level Expectations – Draft – 6/08/07
- Social Studies Grade and Course Level Expectations – DRAFT – no date

Montana

- Grade Level Expectations – Grades 3-8 and 10 – Mathematics – no date
- Grade Level Expectations – Grades 3-8 and 10 – Reading – no date
- Grade Level Expectations – Grades Pre-Kinder-garten-10 & 12 – Science – DRAFT no date
- Montana Standards for Mathematics – 10/1998
- Montana Standards for Reading – 09/2000
- Montana Standards for Science – 11/2006
- Montana Standards for Social Studies – 10/2000
- Montana Standards for Writing and Literature – 10/1999

Nebraska

- Nebraska Mathematics Standards – Grades K-12 – Adopted 12/2000
- Nebraska Reading/Writing Standards – Grades K-12 – Adopted 9/7/01
- Nebraska Science Standards – Grades K-12 – Adopted 5/8/98
- Social Studies / History Standards – No date
- Suggested Grade-Level Expectations – Reading – No Date
- Suggested Grade-Level Expectations – Mathematics – No Date

Nevada

- Nevada English Language Arts – K-8 and 12 – Adopted 03/2001
- Nevada Mathematics Standards – Summer 2006

- Nevada Social Studies Standards – History, Economics, Geography, Civics – June 2000
- Science Standards – no date

New Hampshire

- K-12 Mathematics New Hampshire Curriculum Framework – 06/2006
- K-12 Reading New Hampshire Curriculum Framework – June 2006
- K-12 Science Literacy New Hampshire Curriculum Framework – June 2006
- K-12 Social Studies New Hampshire Curriculum Framework – 06/2006
- K-12 Written and Oral Communication New Hampshire Curriculum Framework – 06/2006

New Jersey

- 2004 Core Curriculum Content Standards – English
- 2004 Core Curriculum Content Standards – Mathematics
- 2004 Core Curriculum Content Standards – Science
- 2004 Core Curriculum Content Standards – Social Studies

New Mexico

- Mathematics Content Standards, Benchmarks, and Performance Standards – Approved 06/2002
- New Mexico Curriculum Framework – Language Arts – Adopted 6/16/00
- New Mexico Science Content Standards, Benchmarks, and Performance Standards
- New Mexico Social Studies Content Standards and Benchmarks – Adopted 6/22/01

New York

- English Language Arts Core Curriculum – 05/2005
- Mathematics Core Curriculum – Revised 03/2005
- Science Core Curriculum – no Date
- Social Studies Resource Guide with Core Curriculum – no Date

North Carolina

- English Language Arts Standard Course of Study and Grade Level Competencies – Revised 2004
- Mathematics Standard Course of Study and Grade Level Competencies – Revised 2003
- North Carolina Social Studies Standard Course of Study – 08/2006
- Science Standard Course of Study – Revised 2004

North Dakota

- North Dakota Content and Achievement Standards – Social Studies – 11/2006
- North Dakota English Language Arts Content and Achievement Standards – 04/2005
- North Dakota Mathematics Content and Achievement Standards – 04/2005
- North Dakota Science Content and Achievement Standards – 03/2006

Ohio

- Academic Content Standards – Language Arts – no date

- Academic Content Standards – Mathematics – no date
- Academic Contents Standards – Science – no date
- Academic Content Standards – Social Studies – no date

Oklahoma

- Priority Academic Student Skills – Language Arts – Adopted 7/24/03
- Priority Academic Student Skills – Mathematics – Adopted 7/24/03
- Priority Academic Student Skills – Science – Adopted 7/24/03
- Priority Academic Student Skills – Social Studies – Adopted 7/24/03

Oregon

- Oregon Standards – English/Language Arts – K-3 Adopted 06/2002, 4-CIM Adopted
- Oregon Standards – Mathematics – Adopted 02/2002
- Oregon Standards – Science – Adopted 04/2001
- Oregon Standards – Social Sciences – Adopted 04/2001

Pennsylvania

- Academic Standards for Civics and Government, Economics, Geography, History – 07/18/02
- Academic Standards for Mathematics – no date
- Academic Standards for Reading, Writing, Speaking and Listening – no date
- Academic Standards for Science and Technology – 01/05/02

Rhode Island

- Draft Rhode Island Grade Span Expectations for Government & Civics and Historical Perspectives – Revised after 4/13/07
- New Hampshire and Rhode Island Grade Level Expectations LOCAL (GLEs) for grades 5-8 and Local GSEs for 9-10 and 11-12 – Reading – 2006 Final Version
- Rhode Island and New Hampshire Grade-Level Expectations LOCAL (GLEs) for grades K-5 – Reading – 2006 Final Version
- Rhode Island and New Hampshire LOCAL Grade Level Expectations (GLEs) for Written & Oral Communication – K-5 – 2006 Final Version
- Rhode Island and New Hampshire LOCAL Grade Level & Grade Span Expectations (GLEs & GSEs) for Written & Oral Communication – Grades 5-12 – 2006 Final Version
- Rhode Island Grade Span Expectations K-12 – Life Science – Updated 03/01/06
- Rhode Island High School Grade-Span Expectations – Mathematics – Final Version 05/2006, Edited 08/02/07
- Rhode Island K-8 Mathematics Grade-Level Expectations – Final Version 06/2006, Edited 08/02/07
- Rhode Island Science Grade Span Expectations K-12 – Earth and Space Science – Updated 08/20/07
- Rhode Island Science Grade Span Expectations K-12 – Physical Science – Updated 01/13/06

South Carolina

- South Carolina Academic Standards for English Language Arts – 2007
- South Carolina Academic Standards for Mathematics – 2007
- South Carolina Science Academic Standards – 11/2005
- South Carolina Social Studies Academic Standards – 01/2005

South Dakota

- Science Content Standards – Approved 03/22/05
- Social Studies Content Standards – Approved 05/15/06
- South Dakota Language Arts Content Standards – 03/2007
- South Dakota Math Content Standards – 05/2004
- South Dakota Reading Content Standards – 03/2007

Tennessee

- English/Language Arts Curriculum Standards – Approved 8/31/01
- Mathematics Curriculum Standards – Approved 8/31/01
- Social Studies Curriculum Standards – no date
- Tennessee Science Standards – DRAFT K-8, no date
- Tennessee Science Standards – High School Level – Approved 08/31/01

Texas

- Chapter 110. Texas Essential Knowledge and Skills for English Language Arts and Reading – 09/01/98
- Chapter 111. Texas Essential Knowledge and Skills for Mathematics – 09/01/98
- Chapter 112. Texas Essential Knowledge and Skills for Science – 09/01/98
- Chapter 113. Texas Essential Knowledge and Skills for Social Studies – 09/01/98

Utah

- Elementary Core Curriculum – Language Arts K-6 – 05/09/03
- Elementary Core Curriculum – Mathematics K-6 – 06/2007
- Elementary Core Curriculum – Science K-6 – 03/2002
- Elementary Core Curriculum – Social Studies 3-6 – 08/2000
- Secondary Core Curriculum – Language Arts 7-12 – 2006
- Secondary Core Curriculum – Mathematics 7-12 – 06/2007
- Secondary Core Curriculum – Science: Earth Systems Science, Biology, Chemistry and Physics – 04/2003
- Secondary Core Curriculum – Science: Integrated Science 7-8 – 04/2003
- Secondary Core Curriculum – Social Studies 7-12 – 04/2002

Vermont

- Grade Expectations for Vermont’s Framework of Standards and Learning Opportunities –

- History and Social Sciences – Summer 2004
- Grade Expectations for Vermont’s Framework of Standards and Learning Opportunities – Mathematics – Spring 2004
- Grade Expectations for Vermont’s Framework of Standards and Learning Opportunities – Reading and Writing – Spring 2004
- Grade Expectations for Vermont’s Framework of Standards and Learning Opportunities – Science – Summer 2004

Virginia

- English Standards of Learning – 11/2002
- History and Social Science Standards of Learning – 03/2001
- Mathematics Standards of Learning – 10/2001
- Science Standards of Learning – 01/2003

Washington

- K-10 Grade Level Expectations – Reading & Writing – 2005
- K-10 Grade Level Expectations – Science – 2005
- Mathematics (Edition 2) – K-12 Grade Level Expectations – Working Draft – 9/8/06
- Social Studies Grade Level Expectations – Draft 8/22/07

Washington, D.C.

- District of Columbia Mathematics Pre-K through Grade 12 Standards, no date
- District of Columbia Reading/English Language Arts Pre-K through Grade 12 Standards, no date
- District of Columbia Science Pre-K through Grade 12 Standards, no date
- District of Columbia Social Studies Pre-K through Grade 12 Standards, no date

West Virginia

- 21st Century Mathematics Content Standards and Objectives – Effective 07/01/08
- 21st Century Reading and English Language Arts Content Standards and Objectives – Effective 07/01/08
- 21st Century Science K-8 Content Standards and Objectives – Effective 07/01/08
- 21st Century Social Studies Content Standards and Objectives – Effective 07/01/06
- Policy 2520.3 Science Content Standards and Objectives – Effective 07/01/03

Wisconsin

- Wisconsin’s Model Academic Standards for Science, Mathematics, English Language Arts, and Social Studies

Wyoming

- Wyoming Language Arts Content and Performance Standards – Adopted 07/07/03
- Wyoming Mathematics Content and Performance Standards – Adopted 07/07/03
- Wyoming Science Content and Performance Standards – Adopted 07/07/03
- Wyoming Social Studies Content and Performance Standards – Adopted 07/07/03



A Union of Professionals

American Federation of Teachers, AFL-CIO

555 New Jersey Ave. N.W.

Washington, DC 20001

202/879-4400

www.aft.org

March 2008