Recommendation One

Rigor

"Institutionally, we do not yet realize that 12 years of generous, daily amounts of in-school reading, writing, and discussion, built around good questions (shared and refined by teams and networks of teachers), would create unimagined intellectual, academic, and professional possibilities for our children."¹

Recommendation 1—Rigor. Hold high expectations and provide numerous avenues of support so that each middle grades learner succeeds. Use California’s content standards, frameworks, adopted and aligned instructional materials, and common formative assessments as the coherent foundation for rigorous curriculum and instruction.

Rigor is one of the Recommendations in the Focus Area on Academic Excellence.

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An Academically Rigorous Program for All Students

The concept of rigor is at the heart of the education reform movement. In middle grades philosophy and in the education reform movement, rigor is a critical component of academic excellence and is central to preparing students in the middle grades to succeed in high school and in the global community. To that end, the National Forum to Accelerate Middle Grades Reform (Outside Source) uses four criteria to identify schools that are on a trajectory toward success:

- Academic excellence
- Developmental responsiveness
- Social equity
- Organizational structures and processes

Three of the criteria for academic excellence used by the forum in its California Schools to Watch™ - Taking Center Stage program that focus on rigor are as follows:

- All students are expected to meet high academic standards.
- Curriculum, instruction, assessment, and appropriate academic interventions are aligned with high standards.
- The curriculum emphasizes deep understanding of important concepts and the development of essential skills.

Articles contained in Understanding and Reporting on Academic Rigor: A Hechinger Institute Primer for Journalists (PDF; Outside Source), provide a spectrum of background information, opinions, and definitions from experts, educators, and non-educators. The publication offers advice to journalists on how to recognize and report about rigor in the context of teaching and on what constitutes rigorous coursework. In addition to the broad discussion about rigor, the report includes a list of experts and resources focused on academic rigor. The articles in the report provide excellent questions to guide professional learning community discussions. For example:

- How does your definition and understanding of academic rigor compare with the information presented in this publication?
- How can this information be used to initiate or advance the discussion of academic rigor happening on your site?

Since the advent of the No Child Left Behind Act, education has focused on reading and math scores and on closing the achievement gap between social classes. However, in 2007, a report from the New Commission on the Skills of the American Workforce¹ (a bipartisan group of education secretaries, business leaders, and a former governor) suggested a new blueprint for American education. In spite of some controversial proposals, the commission agreed on one priority: Teaching must prepare students for success in the twenty-first century. Students must be competent in reading, math, science, and technology and acquire:

- Knowledge about the world
- Creative thinking
- The ability to gain access to and use new sources of information
- The ability to communicate and work well with people¹

Rigor in the middle grades is critical in helping to prepare students with the skills they will need to succeed in high school and to participate in the global economy. A comparison of the skills needed by students to participate in twenty-first century life with research about best practice shows that rigor in the middle grades includes:

- Academic and career goal setting
- Schoolwide academic literacy—including vocabulary development, note taking, grade-level reading, and writing
- Academic discourse
- How to think critically and apply knowledge to real-world problems
- Expository writing and the ability to write a five-paragraph essay
- Term paper organization, research, and writing skills
- State content standards for science and frequent hands-on experiments in laboratories
- Algebra as a gateway to college and career
- History, geography, civic literacy, and foreign languages to prepare informed citizens
- Technological literacy
- Understanding of the visual and performing arts as a means of expression
- Physical fitness and health education
Related Links

- Academic Literacy, Recommendation 1—Rigor, TCSII.
- The Hechinger Institute on Education and the Media (Outside Source)

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High-impact schools

Footnote
1Tough Choices or Tough Times—The Report of the New Commission on the Skills of the American Workforce (PDF; Outside Source).

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High-impact schools

The Education Trust coined the term **high impact** in reference to schools that make greater-than-expected gains with previously underperforming students.\(^1\) In other words, high-impact schools find ways to deliver rigor to **all** students and provide numerous avenues of support. In high-impact schools,

> . . . teachers and administrators express consistent views about achievement-related school goals. In average-impact schools, there is much less consistency. In high-impact schools, teachers embrace external standards and assessments. In average-impact schools, teachers simply tolerate these things.\(^2\)

Additionally, in high-impact schools, students who are behind grade-level standards spend 10 percent more time in academic courses than their counterparts in average-impact schools.\(^3\)

Academic Achievement in the Middle Grades: What Does the Research Tell Us? (PDF; Outside Source) includes results from an in-depth survey of test scores from more than 28,000 sixth- and eighth-graders. After reviewing the survey responses, researchers reported that student achievement resulted from both academic rigor and social/personal support, regardless of students’ backgrounds and school demographics. They also found that “no matter how strongly a school caters to students’ affective and social needs, achievement depends on academic expectations and demands.”\(^4\)

California’s world-class content standards are rigorous and set high expectations for all students. Standards-based learning is part of a collaborative strategy that will help to close the achievement gap. However, it requires a large human investment of both time and energy. Many middle grades students come to school facing numerous challenges in their personal lives (for example, poverty, discrimination, learning English as a second language, disability, inadequate parenting, or learning gaps due to past ineffective teachers). Professional learning communities can combine their collective ingenuity to help these students succeed by:

- Using assessment and accountability results and targeting curriculum and instruction to meet students’ needs.
- Devising instructional strategies that give all students multiple opportunities to master those standards.
- Creating challenging enrichment activities to engage advanced and gifted learners.
- Providing students with extended time in class and outside the classroom.
- Teaching writing in every subject.

### Footnotes

2. Ibid., 14.
3. Ibid., 14.
High expectations for all students

Another key finding from a study of high-impact schools is that staff members share high expectations for all students. In addition, the staff members are results-oriented and believe that all students can learn from a rigorous curriculum, instructional materials, and instructional practices that are aligned to the standards.¹ This means that teachers collaborate to ensure that gifted students, average students, and those considered "at risk" all receive challenging and engaging grade-level lessons.

Research on youth resilience supports the call for high expectations.

"Perhaps more than any other variable, low expectations on the part of school staff have been correlated with poor student academic outcomes and vice versa: high expectations—with the support necessary to meet them—directly relate to positive academic outcomes … Schools which establish high expectations for all youth—and give them the support necessary to achieve them—have high rates of academic success. These schools also have lower rates of problem behaviors such as dropping out, alcohol and other drug abuse, teen pregnancy, and delinquency than other schools. Conveying positive and high expectations in a classroom and school environment occurs at several levels. The most obvious and powerful is at the belief level, where the teacher and other school staff communicate the message that the student has everything he or she needs to be successful . . . Schools also communicate expectations in the way they are structured and organized. The curriculum that supports resilience respects the way humans learn. Such a curriculum is thematic, experiential, challenging, comprehensive, and inclusive of multiple intelligences and multiple perspectives—especially those of silent groups. Instruction that supports resilience focuses on a broad range of learning styles; builds from perceptions of student strengths, interests, and experience; and, is participatory and facilitative, creating ongoing opportunities for self-reflection, critical inquiry problem solving, and dialogue.”²

In the Spotlight

Mathson Middle School, Alum Rock Union School District, a 2006 On the Right Track School

Lee Mathson Middle School is one of the On the Right Track schools and districts making a difference in student achievement as recognized by the California Department of Education. Overall statewide testing results for the school exceeded the Academic Performance Index (API) targets for the entire student body and for the two main subgroups (Hispanic and socioeconomically disadvantaged).

Part of Mathson's success is based on the school's high expectations for all students. The high expectations at Mathson translate into a strategic focus on helping the large English-learner population. The schoolwide goal is to help each student who scored a 1 or 2 on the California English Language Development Test (CELDT) make rapid progress by gaining three academic years of English language development within one year.

- Mathson DataQuest School Profile
- Mathson Middle School (Outside Source)
- On the Right Track
- On the Right Track 6
- School on the Right Track: Mathson Middle School, (Outside Source) SchoolsMovingUp WestEd

Parents, guardians, and other adults who care for individual students play a role in conveying high expectations for goal setting, rigorous
study, and for allocating additional homework time when learning is difficult. Their children's prospects for future employment and California's economy rely on a commitment to high expectations and rigorous instruction and learning.

High standards help students develop self-confidence. "Self-efficacy is a critical component of developing one's identity and sense of self—the major developmental task of the adolescent years. If a large percentage of students do not score high in the asset of self-efficacy, this may indicate the prevalence of low expectations in your school." ³

Related Links

- Getting Results: Developing Safe and Healthy Kids Update 5—Student Health, Supportive Schools, and Academic Success (2005) (PDF; 905KB; 89pp.), California Department of Education.
- The Resilience Youth Development Module (PDF; Outside Source), Education Resources Information Center (ERIC), 2009.

Footnotes

3 Ibid., 32.
Numerous avenues of support

Holding high expectations is impossible without giving students the support they need—including accelerated academic interventions—to catch those who fall behind. Avenues of support include prevention and intervention. Preventative measures are good for all students, and include differentiated instructional techniques and continuous progress monitoring. Interventions are for those who fall behind grade-level achievement and need additional support. Both the prevention and intervention strategies are covered in more detail in the section on Response to Instruction and Intervention (RTI²) in Recommendation 2—Instruction, Assessment, and Intervention.

The middle grades present students with increased demands for critical thinking, organizational skills (to manage homework and assignments), and social competence. While believing that all students can succeed, effective middle grades communities still recognize that not all students will progress at the same rate. Some students will get a concept quickly and need to move to additional challenging materials to prevent boredom. Other students will need formalized avenues of support and many opportunities to practice before they understand and succeed. Because students are individuals and have unique learning styles and needs, teachers and schools must build a coherent system of support and opportunity both inside the classroom and throughout the school.

It is important to point out the difference between the word opportunity and the concept of numerous avenues of support in regard to academic supports. Typically, opportunity means that students can choose to participate in something. However, if students choose not to take advantage of the opportunity, they fail to learn the content from that missed opportunity. Numerous avenues of support is a stronger concept than opportunity. The avenues of support are sequenced, structured, mandatory, and tailored to help students to succeed. The decision to take advantage of an opportunity is not left to the student; it is a part of teacher planning and the expectation that failure is not an option.

Some of the ways teachers can help students to try, try, and try again to understand a concept include the following measures:

- Require students to revise assignments and give them meaningful, instructive feedback until student work meets or exceeds grade-level proficiency standards.
- Reinforce complex concepts across the curriculum (refer to Cross-curricular connections; writing across the curriculum in Recommendation 4—Relevance).
- Teach and reteach missed concepts through accelerated academic interventions (refer to Interventions in Recommendation 2).

Numerous avenues of support can include additional activities that are mostly voluntary, such as Saturday school, learning labs, homework centers, and tutoring.

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Academic Literacy

One of the numerous avenues of support that helps students achieve success is to teach students to read, interpret, and use academic language. Academic literacy refers to the advanced skills students must have to be able to achieve grade-level standards in each academic area in middle and high schools.

Development of academic literacy is a deliberate strategy employed by all teachers and library-media center coordinators. In most cases, the English-language arts teacher will help other teachers implement literacy strategies across the curriculum. For example, mathematics or science teachers can learn how to reinforce vocabulary used in the lesson and check that all students understand the terms used in both the explanations and in the problems.

The Right to Literacy in Secondary Schools (Outside Source) is a new study based on the work of the Public Education & Business Coalition (PEBC), a non-profit that is nationally known for its expertise in literacy and professional development. The book challenges educators to view adolescent literacy as a civil right that enables students to understand essential content and to develop as independent learners. Nationally, concern is growing that middle and high school students do not know how to read, write, listen, speak, and think at the levels needed to succeed as college students, members of the workforce, and fully participating members of our democracy. Secondary teachers in all content areas must be able to help students develop the tools to analyze, evaluate, critique, and question texts of all sorts.

The Right to Literacy in Secondary Schools was designed to be used by school-based professional learning communities or study groups, and is divided into three sections:

i. Vision and Value: What Literacy Looks Like and Why It Matters
ii. Beliefs into Practice: Literacy as a Means to Content Area Teachers’ Ends
iii. Essential Frameworks: How to Help All Adolescents Engage, Think, Understand, and Develop Independence

Each chapter includes discussion questions and reflections from school leaders. The book is meant to be both a call to action and a practical guide to reform-minded schools and districts.

In Part II of The Right to Literacy in Secondary Schools, the authors examine how literacy serves the specific goals that math, science, social studies, and language arts teachers have for students to deeply understand particular content/concepts and to develop independence in how to think, learn, read, and write about a given academic discipline. In Chapter 5, Mathematics Teaching for Understanding: Reasoning, Reading, and Formative Assessment (PDF; 166KB; 16pp), authors Paula Miller and Dagmar Koesling describe the role that literacy plays in mathematics instruction.

The topic of adolescent literacy is receiving increased attention—especially at the secondary level, where teachers are responsible for teaching content regardless of each student's literacy level in English. A new study titled, Meeting the Literacy Development Needs of Adolescent English Language Learners Through Content Area Learning, Part One: Focus on Motivation and Engagement (PDF; Outside Source) identified several principles that appear in both the adolescent literacy and English learner research on the topics of motivation and engagement:

- Make connections to students' lives
- Create responsive classrooms
- Have students interact with each other and with text

The researchers authored a subsequent report based on the same educational research, but with a Focus on Classroom Teaching and Learning Strategies (PDF; Outside Source).

Academic literacy is particularly important for English learners (ELs) who may be fluent in the language of everyday activities but not in academic English. Students who have not achieved grade-level standards may need to learn skills usually associated with elementary instruction (Recommendation 2—Interventions).

When teaching academic subjects, teachers may use several strategies to help both English learners and other students who struggle to get more out of lessons:

- Show students how to understand and use textbook features such as the table of contents, highlighted sections, glossary, and answer key.
Model how to read a text, such as how to study the questions throughout the text and notice at the end of the chapter what information is significant. Build a context for the lesson and connect learning to student experiences.\(^1\) (For more about building connections for learning, refer to Recommendation 4—Relevance.)

Students also need the skills to be able to express themselves both orally and in written academic language. Literacy improves with study skills, connecting current knowledge to prior knowledge, and scaffolding.


Related Links

- Connections to prior knowledge—Recommendation 2, TCSII.
- Scaffolding—Recommendation 2, TCSII.
- Study skills—Recommendation 2, TCSII.

Footnote
\(^1\)Marge Scherer, "Increasing Reading Comprehension of English Language Learners," *Education Update*, Vol. 48, No. 6 (June 2006).
Vocabulary development

Middle level students are moving from the learning-to-read phase of their education to the reading-to-learn phase. For example, students may have skills that allow them to read a sixth-grade novel but may lack the academic vocabulary needed for interpreting sixth-grade history or science instructional materials.

The Reading/Language Arts Framework for California Public Schools Kindergarten Through Grade Twelve (2007) (PDF; 6.05MB; 386pp.) recommends vocabulary development as an important strategy in each grade level. In the framework, the Criteria for Evaluating Instructional Materials (DOC; 1.22MB; 67pp.) emphasize vocabulary words from science, history, and mathematics in developing students’ vocabularies.

For many middle school teachers, the need to focus on vocabulary and reading is a new concept. In the past, most middle grades educators assumed that reading instruction was an elementary teacher’s job. However, because nearly 44 percent of California’s children ages five to seventeen speak a language other than English at home (more than twice the national rate); all teachers must be skilled in helping students gain an academic vocabulary.

Vocabulary development can help to close the achievement gap, particularly for students from low-income or non-English-speaking homes. For example, research by Hart and Risley found that low-income children might have a more limited vocabulary than more affluent peers. By the time they are in first grade, children in low-income families have gained 5,000-word vocabularies. In contrast, children from more affluent families enter school with vocabularies of 20,000 words.

Robert Marzano is a proponent of building student vocabulary. His Six steps to Building Academic Vocabulary (Outside Source) outlines a six-step process for helping students learn academic vocabulary. It gives alternatives to rote memorization, which research has shown to be ineffective. Marzano advocates:

- Building ways for students to explain new terms in their own words.
- Allowing time for students to explain new concepts to each other to build on the power of relationships.
- Finding multiple ways for students to apply the new words. This latter concept underscores the importance of interdisciplinary team teaching—teams can even post new academic words in common spaces and brainstorm games, songs, and interdisciplinary projects to reinforce new concepts across disciplines.

The Preliminary Report on the 2004-05 Evaluation Study of the ASCD Program for Building Academic Vocabulary reported the findings on the effectiveness of building academic vocabulary (based on Marzano’s book, Building Background Knowledge for Academic Achievement). The study found that the ASCD program helped students read and understand content and gain academic background knowledge that raised their achievement. Furthermore, "ELL and students on free and reduced lunch programs demonstrated gains in achievement after using the vocabulary program.”

When academic area teachers regularly use proven vocabulary strategies with words from their own textbooks, students develop their vocabulary and achievement improves. Students can expand their academic vocabulary through structural analysis—the study of classic roots. Equally important is to have all teachers in academic subjects use text-based strategies, including regular review of the basic structures found in expository texts such as:

- Compare/contrast
- Problem/solution
- Description
- Spatial order
- Chronological order
- The transition words that identify each of the above (such as "if . . . then," "in order," or "like")

In addition, many educators appreciate the research and strategies developed by Kate Kinsella. Access Dr. Kinsella's presentations about teaching explicit vocabulary, engaging middle grades learners, and developing academic language across the curriculum by visiting the TCSII Dr. Kinsella Professional Learning Index.
Gaspar De Portola Middle School, San Diego Unified School District

The library/media teacher sponsors a student Literacy Council that both chooses and reviews books. The council also prints a quarterly newsletter for all students. (For more about how the library/media center increases student engagement in learning, refer to Recommendation 4—Relevance).

- De Portola DataQuest School Profile
- De Portola Middle School (Outside Source)
- library/media center
- Recommendation 4—Relevance, TCSII

Related Links

- "Reading Comprehension Requires Knowledge of Words and the World: Scientific Insights into the Fourth-Grade Slump and the Nation's Stagnant Comprehension Scores" (PDF; Outside Source), E. D. Hirsch, Jr., American Educator, No. 27 (Spring 2003), 10–29.

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Footnotes

4Ibid.
Critical thinking

Effective teachers know that students must think critically about materials before real learning takes place. Research on student learning supports the importance of critical thinking. By comparing eighth-grade scores on the National Assessment of Education Progress (NAEP) (Outside Source) to the classroom practices and backgrounds of their teachers, Wenglinsky (2000) found that "A focus on higher-order thinking skills and engagement in hands-on learning proved particularly important" for student achievement.¹

Stimulating student discussions about moral dilemma—in novels, current events, or historical events—is one way to create engaging lessons. Class discussions about dilemmas challenge students to think critically and to develop their intrapersonal intelligences² (according to Howard Gardner's multiple intelligences and education [Outside Source]).

The California content standards and curriculum frameworks emphasize critical thinking. For example, the following references specifically refer to strategies that develop thinking skills:

- The Reading/Language Arts Framework for California Public Schools Kindergarten Through Grade Twelve (2007) (PDF; 6.05MB; 386pp.) includes strategies that require students to develop critical thinking and application skills. For example, the framework says, a comprehensive program ensures that students learn to read and write, comprehend and compose, appreciate and analyze, and perform and enjoy the language arts. They should spend time immersed in high-quality literature and work with expository text, learn foundational skills in the alphabetic writing system, and study real books. A comprehensive program ensures that students master foundational skills as a gateway to using all forms of language as tools for thinking, learning, and communicating.

- The History-Social Science Content Standards for California Public Schools Kindergarten Through Grade Twelve (PDF; 600KB, 68pp.) emphasize skills attainment and social participation in order for students to develop participation skills, critical thinking skills, and basic study skills.

Related Links

- Developing, Using, and Communicating Complex Reasoning, Document Library, TCSII.
- Questioning strategies, Recommendation 2—Instruction, Assessment, and Intervention, TCSII.
- Rigor/Relevance Framework (Outside Source), William Daggett, International Center for Leadership in Education.

Footnotes

¹Academic Achievement in the Middle Grades: What Does the Research Tell Us? (PDF; Outside Source) Atlanta, Ga.: Southern Regional Education Board, 2003, 7.
²“Some Classroom 'Dilemmas' Are Beneficial” (Outside Source), Education World.
Reading across the curriculum

Researcher Michael Schmoker talks about the importance of deep reading and re-reading as cornerstones for authentic literacy that goes beyond teaching students to decode and recognize words. Schmoker advocates, on the basis of research, devoting time for reading and meaningful discussion about the passages throughout the day. In fact, he states that an additional 15 minutes of reading each day will increase academic growth by three months.

In her book Deeper Reading, Kelly Gallagher states that too often students are taught to answer surface questions about passages before they develop a real connection to or understanding of the deeper meaning. She argues that students cannot become successful until teachers help them develop the interest, skills, and confidence to dig deep and uncover important ideas about life. The State Board of Education has adopted instructional materials for reading.

Time to Act: An Agenda for Advancing Adolescent Literacy for College and Career Success (PDF; Outside Source) is a 2009 report released by the Carnegie Corporation of New York’s Council on Advancing Adolescent Literacy. The report calls on education leaders to restructure schools around literacy, particularly in grades four through twelve.

The report advocates:

- Hiring teachers skilled in developing literacy instruction in content areas.
- Building adolescent literacy training into preservice and ongoing professional development for teachers and principals.
- Using and maintaining statewide data systems that inform all literacy instruction.

The report engages readers using middle and high school case studies that illustrate the main components of a literacy agenda. It provides details for district and school actions that will promote literacy based on the following components demonstrated by “beat-the-odds” schools:

- The school culture is organized for learning.
- Information drives decisions.
- Resources are allocated wisely.
- Instructional leadership is strong.
- Professional faculty is committed to student success.
- Targeted interventions are provided for struggling readers and writers.
- All content area classes are permeated by a strong literacy focus.

The focus on developing academic literacy across the curriculum is one of the hallmarks of middle grades education.

Reciprocal teaching

In studies of reciprocal teaching as a strategy for helping struggling students, researchers found that reciprocal teaching resulted in greater gains and maintenance over time. Reciprocal teaching helps students understand expository texts by calling on the teacher and the students to take turns leading a dialogue about sections of a text by using four main strategies: prediction, questioning, summarizing, and clarifying misleading or complex sections of the text. Teachers often assign roles during a reciprocal teaching exercise. Students act as presenter, reader, or note-taker so that they learn a collaborative strategy for understanding material.

According to A. S. Palincsar, reciprocal teaching (Outside Source) strategies serve the following purposes:

- **Summarizing** provides students with the opportunity to identify and apply the most important information in the text (either by writing sentences or across paragraphs and across the passage as a whole.)
- **Asking questions** reinforces the summarizing strategy. When students generate questions, they first identify the kind of information that is significant enough to provide the substance for a question. They then pose this information in question form and self-test to determine if they can answer their own question. In some cases, the questions focus on the ability to master supporting detail information; others require that the students be able to infer or apply new information from text.
- **Clarifying** takes students beyond merely saying the words to understanding the meaning. When the students clarify, they uncover many reasons why text is difficult to understand (e.g., new vocabulary, unclear reference words, and unfamiliar and perhaps difficult concepts).
Predicting challenges students to hypothesize what the author will discuss next. This activity builds a purpose for reading: to confirm or disprove their hypotheses. The predicting strategy also facilitates use of text structure as students learn that headings, subheadings, and questions embedded in the text are useful means of anticipating what might occur next.6

Oral reading strategies

In spite of a common perception that oral reading is an elementary school strategy, it has many benefits for middle grades students—especially those who have not developed strong academic literacy. However, oral reading may be daunting to many young adolescents who are going through an awkward phase in their physical development. They shy away from anything that draws attention to them. As a result, oral reading strategies must be fun, and teachers must ensure that students are safe from taunting or heckling if they do not pronounce words correctly.

The following oral reading strategies capitalize on adolescent needs for relationship building and fun. These strategies also increase oral speaking skills, which are a part of academic literacy.

- **Readers' theater** encourages students to create plays about material they are learning and to present the play in class. Students get to hear how others use inflection and pacing to convey emotion. The teacher uses the presentation to clarify misconceptions and to make connections between the play and the standards-based lesson.
- **Think-pair-share** usually pairs a fluent reader with one who needs help. Students take turns reading to each other and share what they have read so they reinforce comprehension.
- **Popcorn reading** keeps students focused since they do not know when their turn will pop. In this strategy, one student reads part of a selection. Another pops in to continue until the next name is called. This strategy helps content area teachers cover text material in class but does not ensure that the student comprehends the material. It is still the teacher’s responsibility to develop metacognitive thinking and comprehension. Through pondering, discussion, and re-reading, students develop comprehension.
- **Literature circles** are groups of four to six students who read and discuss a novel or article. Each member of a circle takes a turn guiding the group discussion and receiving practice in leadership, group interaction, "argumentative literacy," and responsibility. The circles also allow students to control their own learning and to discuss ideas and concerns about issues raised by the passage. The Literature Circles Resource Center (Outside Source) provides many resources to help teachers and includes a link to specific strategies for middle schools.
- **Guided reading** typically involves the whole class in reading a passage together. It allows the teacher to expose children to a wide range of literature while teaching vocabulary and comprehension strategies.

Researchers suggest that cross-curricular connections help to give students the background knowledge they need to make reading meaningful. Researchers caution against narrowing the curriculum when teachers try to help students improve their reading skills.

Although necessary, being able to read all of the words may not be sufficient because comprehending a text requires other abilities such as knowing the meanings of words, possessing relevant world knowledge, and being able to remember the text already read. Thus, word-reading skill is one of several factors influencing comprehension.7

Related Links

- Academic discourse Recommendation 1—Rigor, TCSII.
- Academic Literacy, Recommendation 1—Rigor, TCSII.
- Building Reading Proficiency at the Secondary Level: A Guide to Resrouces (Reciprocal Reading Strategy) (Outside Source), (SEDL) Advancing Research Improving Education.
- English language arts instruction, Recommendation 2—Instruction, Assessment, and Intervention, TCSII.
- English-language development (ELD), Recommendation 2—Instruction, Assessment, and Intervention, TCSII.
- Information literacy, Recommendation 1—Rigor, TCSII.
- Reciprocal Teaching: A Reading Comprehension Package (Outside Source) Intervention Central.
- Interventions in English Language Arts, Recommendation 2—Instruction, Assessment, and Intervention, TCSII.
- State Board Adopted Instructional Materials, California Department of Education
- Vocabulary development, Recommendation 1—Rigor, TCSII.
Footnotes
2 Ibid., 97.
6 Reciprocal Teaching (Outside Source), Learning Point Associates.
Writing across the curriculum

The call for writing instruction comes from many corners. The California Business Roundtable reported that the California State University system provides remedial training in reading, writing, or mathematics to two-thirds of its incoming freshmen at an estimated cost of $30 million per year.\(^1\) The College Board’s National Commission on Writing in the Schools and the Business Roundtable reported in 2004 that their members were spending more than $3 billion per year on remedial writing courses for their salaried and hourly employees.\(^2\)

Dr. Douglas Reeves calls nonfiction writing one of the most powerful practices that impacts student achievement. The Rigor in the Classroom with Dr. Douglas Reeves professional learning activity explores achievement and student socioeconomic status, power standards, nonfiction writing, feedback and grading, and establishing a culture of achievement. Custom-designed exercises help educators (1) survey their current individual and school practices and (2) investigate ways to enhance practices that lead to rigor in the classroom.

In *Results Now*, researcher Michael Schmoker underscores the importance of writing as one of three aspects of literacy that includes reading, writing, and talking. Writing prepares students for every professional venture after high school. Schmoker laments that schools typically assign writing but do not teach it.\(^3\)

A meta-analysis of research on effective instructional strategies led to the finding of 11 specific elements that will help improve the writing abilities of students. The elements are documented in *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High School*. The report lists the following elements of an effective writing program for grades four to twelve:

- Writing strategies
- Summarization
- Collaborative writing
- Goals for a specific product
- Word processing
- Sentence combining
- Prewriting
- Inquiry activities
- Process writing
- Study of models
- Writing for content learning\(^4\)

**Related Links**

- Professional Learning Activities, Reeves 1—Rigor in the Classroom, TCSII.
- Teaching writing, Recommendation 2—Instruction, Assessment, and Intervention, TCSII.

**Footnotes**

\(^1\)Closing Achievement Gaps at All Grade Levels; The Next Phase in Improving California’s Public Schools (PDF; Outside Source). Sacramento: California Business for Education Excellence, 2005, 3.


Academic discourse

Although the ability to read, write, and discuss the content of the reading is all part of academic literacy, the ability to present ideas orally deserves attention because of its importance to students for lifelong success in higher education and careers. Researcher Mike Schmoker calls good academic discourse "argumentative literacy—the soul of education." As such, academic discourse is critical to rigor. When students can discuss what they read, think critically, and defend their positions, teachers get a clear picture of how well students understand and apply the knowledge. In addition, students cement their learning by articulating it and having a dialogue with their peers about their ideas.

The English-language arts standards for listening and speaking reinforce the importance of rigorous academic discourse. At the middle school level, students employ rhetorical strategies to deliver focused, coherent presentations that convey ideas clearly. In addition, students evaluate oral presentations and media communications.

Related Links

- Academic Literacy: A Statement of Competencies Expected of Students Entering California's Public Colleges and Universities (PDF; Outside Source), Intersegmental Committee of the Academic Senates of the California Community Colleges, the California State University, and the University of California, Spring 2002.
- How to Know a Good Adolescent Literacy Program When You See One: Quality Criteria to Consider (PDF; Outside Source), Alliance for Excellent Education, Issue Brief, May 2004.
- Reading for Understanding: A Guide to Improving Reading in Middle and High School Classrooms (Outside Source), Ruth Schoenbach and others, WestEd, 2000.
- The California Reading Initiative and Special Education in California—Critical Ideas Focusing on Meaningful Reform (PDF; Outside Source), California Special Education Reading Task Force, California Department of Education and California State Board of Education, 1999.

Footnote

Information literacy

Middle grades students represent a generation that has grown up with technology. Technology is everywhere and, yet for the most part, is invisible to them. According to the National Educational Technology Plan (2004), the largest group of new users of the Internet from 2000 to 2002 were two to five year-olds.

Today, students are comfortable using technology to socialize, communicate, do homework, listen to music, and create. Students are adept at multitasking with technology (for example, listening to music while using the computer or cell phone to send messages or for real-time chats.) Well-informed teachers can take advantage of this mind-set to motivate students by incorporating technology through such activities as:

- Online research
- Threaded discussions
- Online journaling
- Virtual field trips
- Interactive lessons
- Instant feedback student response systems using handheld “clickers”
- Data collection
- Simulations
- Presentations/publishing
- Problem solving
- Real-time online conversations with scientists, authors, and other experts
- Primary source resources

The Internet has provided instant access to information as well as the means for anyone with access to a computer to become a publisher. Therefore, it is crucial for students to learn that instant access does not mean that information on the Internet is necessarily accurate, reliable, or even authentic. Teachers need to guide students in evaluating Internet information so that students can learn to be discerning media information consumers. The following questions may assist teachers in helping students evaluate Internet content:

**What does the Uniform Resource Locator (URL) tell you?** Students should be able to analyze a Web site address and determine if the information comes from a trusted domain, such as a state (.ca), educational agency (.edu), government (.gov), or from a commercial site (.com). If the site looks suspicious, shorten the URL to end with the domain and view the source.

**Is this Web site someone’s personal page?** Check for these clues: Is there a tilde (~), a percent sign (%), or the words: users, members, or people after the domain name?

**Is there an author or an organization listed in the Web site?** Look for a logo, a digital watermark, or an About link on the Web site that provides this information.

**Is the information current?** Look at whether the Web page is dated (Last updated on ___).

**Are the links within the Web page relevant to the content?** Do the links connect to outside resources that are credible?

**Are bibliographic references included?** Are sources documented?

**Does the Web site content appear to be biased?** If the Web site provides information on a controversial topic or theory, is more than one opinion included? Does the content on the Web site rely on opinions rather than facts to make a point? Are the facts documented with footnotes or other types of citations?

**Can the Web site information be independently verified by another source?** Students should be able to verify the information through focused Web searches, library source reviews, or discussions with content experts.

Related Links
About the Pacific Northwest Tree Octopus (Outside Source).
- Evaluating Information Found on the Internet (Outside Source), Johns Hopkins University.
- Evaluating Web Resources (Outside Source), Sonoma State University Library.
- Evaluating Web Sites: Criteria and Tools (Outside Source), Cornell University Library.
- Integrating technology, Recommendation 4—Relevance, TCSII.
- Why It's a Good Idea to Evaluate Web Sources: Evaluation Criteria (Outside Source), Susan E. Beck, Collection Development Coordinator, New Mexico State University Library.

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Ethics and plagiarism

As noted above, students today usually are familiar—and comfortable—with using the Internet to find information. The Internet is a handy place to do research, but it is also a tempting source for plagiarizing material. Many schools now use plagiarism software to check essays and research papers for unattributed use of materials.

However, checking for plagiarism is only step two. The first step is for schools to teach ethics and responsible ways to use and cite material from a variety of sources. Districts usually develop policies on the use of borrowed information and acknowledgment of sources. Schools may print the policies in the student planners. The beginning of the school year or a research project is a good time to review such policies. Students can discuss what they know about ethics and what plagiarism means. Teachers can use illustrations from music, movies, iPods, and the Internet to illustrate the widespread problems associated with free access to ideas.

Related Links

- Digital Citizenship: Using Technology Appropriately (Outside Source)
- #604 Ethics: Cheating and Plagiarism (PDF; Outside Source), In the Mix, Public Broadcasting Service.
- Ethics Codes (Outside Source), Pew Research Center's Project for Excellence in Journalism.
- Teaching Cyber Ethics (Outside Source), The Cybercitizens Partnership.
- Digital Ethics (Outside Source) Cable in the Classroom.
- Digital Ethics (Outside Source), Instructional Technology.
- Tools for Teachers (Outside Source), Committee for Concerned Journalists.

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California's Standards System—A Coherent Foundation

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California’s Standards System—a Coherent Foundation

The education reform movement grew, in part, from data showing that poor and minority students were often receiving an inferior education due to watered-down curriculum and poorly trained teachers. The solution required that all students receive an equal opportunity to learn the same challenging content and skills. As a result, states began adopting content standards for each course and grade level. In California, the state aligned its curriculum frameworks, instructional materials, assessments, and accountability system to the California content standards.

In a 2006 report, the Thomas B. Fordham Foundation ranked California's standards as being among the top in the nation. The foundation gave California an A grade for each of its content standards: English, math, science, and history.¹

Footnote
Content standards and curriculum frameworks

The content standards adopted by the State Board of Education describe what students should know and be able to do in each major subject area. The standards are established for each grade level or are specific to that course. Within each content standard, the degree of rigor that students are expected to achieve aligns to Benjamin Bloom's cognitive taxonomy, including knowledge, comprehension, application, analysis, synthesis, or evaluative levels of critical thinking.

The curriculum frameworks provide guidance for teachers implementing the content standards along with instructional support that helps every student meet or exceed the content standards. The frameworks are a road map for aligning curriculum, instruction, and professional development to the content standards for each subject area. Some subjects (e.g., health and foreign languages) do not yet have content standards. The frameworks for those subject areas provide a scope and sequence for curriculum and instruction in those areas.

Related Links

- Academic areas, Recommendation 1—Rigor, TCSII.
- Bloom’s Taxonomy—Implications for Testing (DOC; 24KB; 1p.), California Department of Education.
- Content Standards, California Department of Education.
- Curriculum, Recommendation 1—Rigor, TCSII.
- Curriculum Frameworks. California Department of Education.
Alignment with the standards

In a standards-based system, effective teachers match (align) lessons to the academic content standards. Rigor in the middle grades depends on careful curriculum alignment of the grade-level content standards with all aspects of learning, including:

- Curriculum and instruction based on the content standards and curriculum frameworks (refer to the later section on Curriculum maps)
- Instructional materials
- Assessment
- Remediation (academic interventions)
- Accountability

Curriculum calibration refers to the process of aligning curriculum with the state’s standards and adopted materials. As noted in the original Taking Center Stage, when team members discuss their lessons and common assessments, they make discoveries about students’ minimal exposure to some standards and overexposure to others (particularly earlier grade-level standards). They may also discover activities that do not connect to standards in any way. Curriculum calibration is the basis for deciding what stays, what goes, and what needs to be reshaped or enhanced.

Related Links

- Curriculum Maps, Recommendation 1—Rigor, TCSII.

Previous
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Instructional materials

Middle school instructional materials adopted by the State Board of Education (SBE) are aligned to grade-level content standards that are rigorous and build on those from the previous year. By using the aligned materials, teachers reduce planning time. In addition, all students benefit when teachers hold high expectations and provide sequenced, standardized instruction through the use of state-adopted, standards-aligned instructional materials. For example, as soon as regular progress monitoring indicates that a student does not understand a lesson, the teacher can provide additional support using standards-aligned instructional materials. Many state-adopted instructional materials include instructional support components.

California Education Code Section 60422 requires all local school boards to ensure that each student in kindergarten through grade eight is provided with a standards-aligned textbook or basic instructional materials officially adopted by the SBE.

Note: Assembly Bill X4 2 (Chapter 2, Statutes of 2009-10 Fourth Extraordinary Session) signed on July 28, 2009, suspended the process and procedures for adopting instructional materials, including framework revisions, until the 2013-14 school year. Senate Bill 70 (Chapter 7 of the Statutes of 2011) extended that suspension until the 2015-16 school year.

Related Links

- Instructional Materials Adoptions, California Department of Education.
- Instructional Materials FAQ, California Department of Education.
California's Assessment System

Many educational researchers agree that professional learning communities need to meet regularly to plan or adjust curriculum and instruction based on the results of common assessments.\(^1\)

In the California system, there are statewide end-of-course or -year assessments (summative assessment). Many schools and districts also develop and administer regular common assessments (formative assessment).

- **Formative Assessments.** Formative assessments are a component of State Board of Education-adopted instructional materials. Local schools and districts also develop local benchmark assessments. These assessments provide critical data on student progress and assist instructional teams in providing timely, targeted support to individual students.

- **California Standards Tests.** California's statewide end-of-year California Standards Tests (CSTs) are aligned to the content standards and measure students' acquisition of grade-level standards. This statewide assessment measure is not formative but summative in nature. It provides an overview of student progress and serves as a primary indicator for both the state and federal accountability systems.

The following chart shows the courses offered in the middle grades and links to related standards, frameworks, and testing (assessment) blueprints.

<table>
<thead>
<tr>
<th>Courses</th>
<th>California State-Adopted Standards</th>
<th>Curriculum Frameworks</th>
<th>California Standards Test Blueprints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading/Language Arts</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>History-Social Science</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mathematics</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Science</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Career Technical Education</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>World Language</td>
<td>(2009)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>(2008)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>X</td>
<td>(2008)</td>
<td></td>
</tr>
<tr>
<td>Visual and Performing Arts</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Related Links**

- Assessment. Recommendation 2—Instruction, Assessment, and Intervention, TCSII.
Footnote

Accountability

The accountability system helps schools track their progress toward meeting both state and federal requirements for student achievement. The primary purpose of the accountability system is to ensure that all stakeholders are accountable for helping all students achieve grade-level standards and prepare for success in high school and beyond.

Related Links

- Accountability, California Department of Education
- Recommendation 11—Accountability, TCSII.

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Assessments

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Performance levels
Performance levels

As part of a coherent system to deliver academic rigor, the State Board of Education defined performance levels to answer the question, How well has the student mastered the content? The following performance levels identify student achievement on the California Standards Tests:

- Advanced
- Proficient—the goal for all students set by the State Board of Education
- Basic
- Below Basic
- Far Below Basic

Because the content standards build on one another and become more rigorous in the middle grades, students who do not achieve at the proficient level before promotion to the next grade are at risk of falling behind. Scores at Basic, Below Basic, and Far Below Basic are warning signs for middle-level educators. Educators must have a solid academic plan in place for incoming sixth- or seventh-grade students who are performing at Basic and below. Those students should be assessed to determine their need for targeted intervention and accelerated instruction.

Closing the achievement gap means that all students—particularly those from traditionally underperforming groups—must receive timely, accelerated interventions and support so that they can achieve at the proficient level or above on tests.

Related Links

- Interventions, Recommendation 2—Instruction, Assessment and Intervention, TCSII.
State policy on standards

The State Board of Education believes that all the California academic content standards are essential for students. However, in spite of the importance of all standards, not all standards are equal. Some need considerable coverage, and some are relatively easy to cover in a short amount of time. Key standards are noted in the mathematics and the visual and performing arts. Doug Reeves first coined the term power standards to indicate the major or higher-order standards. Districts have the prerogative to identify power standards to cover in a year.

Many practitioners believe that focusing on fewer standards allows for deeper learning. Robert Marzano and Mike Schmoker join Reeves and other researchers who advocate power standards. In international comparisons, the highest-scoring countries attempt to teach less than a third as many topics as those found in U.S. textbooks. "Narrowing the curriculum,' when done right, is not just permissible but essential."¹

The Coalition of Essential Schools (CES) (Outside Source) emphasizes the importance of teaching to develop deep understanding, implying a need to focus on power standards. One of the ten CES Common Principles (Outside Source) focuses on:

**Less is more, depth over coverage.** The school's goals should be simple: that each student at a minimum master a number of essential skills and areas of knowledge. While these skills and areas will, to varying degrees, reflect the traditional academic disciplines, the program's design should be shaped by the intellectual and imaginative powers and competencies that the students need, rather than by subjects as conventionally defined. The aphorism "less is more" suggests that curricular decisions should be guided by the aim of thorough student mastery and achievement rather than by an effort to merely cover content.²

Some districts and teachers identify power standards as those most likely to be covered on the California Standards Tests (CST). However, the danger in focusing instruction solely on CST-related power standards is that middle school students need all the standards in order to be well prepared for high school and beyond.

There are strong arguments for both teaching all standards and for focusing on power standards. Each district will need to grapple with whether to teach all the standards or to concentrate on power standards and then be guided by outcomes along the way. The following arguments should be considered when districts focus on power standards (i.e., those most likely to be on state tests):

- **Oral language and mental computation:** The CSTs do not test students on the standards for either oral language or for mental computation, yet both speaking and mental computation skills are essential for success in school and in life.

- **Writing:** The writing standards for middle school are significant. To become truly proficient at writing at this grade level, students need considerable practice writing in different genres and receiving timely feedback from their teachers. Then students can revise, redo, and transfer newly acquired knowledge and skills to the next assignment. The CST in seventh grade contains a writing portion. However, the writing score is only a small portion of the total English language arts score. Teachers are tempted to gloss over teaching writing skills and focus on other standards in hopes that students' scores will be boosted on the test. This focus on test results handicaps students who need writing skills to pass the California High School Exit Examination and prepare for high school, college, and career.

- **Alternating questions:** The Standardized Testing and Reporting (STAR) program alternates test questions yearly to cover all assessable standards over time. As a result, teachers cannot skip teaching a standard one year without handicapping students in their overall preparation for high school.

Local options related to the standards

By statute, school districts have the prerogative to exert local control in determining the scope and sequence of the curriculum based on the grade-level standards and adopted texts. In addition, districts may adopt their own standards as long as they are as rigorous as the state standards. Also, districts find it useful to create their own curriculum guidelines and, in some cases, their own instructional materials.

When developing their curriculum and instruction pacing guides, some districts and schools identify power standards. The term power standards became popular due to the work of educational researchers, such as Doug Reeves, Robert Marzano, and Mike Schmoker, who
refer to **power standards** as “the knowledge, skills, and dispositions that have endurance, leverage, and are essential in preparing students for readiness at the next level; the most essential learning or outcomes.”

As noted above, both the Mathematics Framework and the Visual and Performing Arts Framework for California Public Schools Kindergarten Through Grade Twelve (PDF; 3 MB. 294pp.) identify key standards, and the Reading/Language Arts Framework for California Public Schools Kindergarten Through Grade Twelve (PDF; 7MB; 386pp.) refers to key concepts to identify those standards that students must master to move on to the next grade level. However, key standards and key concepts are not the same as power standards.

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**Footnotes**

2. The CES Common Principles (Outside Source) Coalition of Essential Schools.

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Educating students and parents/guardians about standards

Teachers can help both students and their family members understand the content standards and performance levels throughout the school year by taking the following actions:

- Post content standards in the classroom.
- Write the standard for each day’s lesson on the board.
- Discuss what each standard means in relation to what the students will be able to do at the end of the lesson. Explain terms to ensure that everyone in the class understands. For example, if the standard refers to “figurative language,” ask students for examples. Take special care to ensure that English learners and special education students have the supports needed to grasp the concept.
- Model the learning that demonstrates lesson proficiency.
- Review the standard from the previous lesson.
- Tie the current lesson to the specific standard.
- Preview the standard for the next day’s lesson and show its relation to the current standard students are studying.
- Prior to an assignment, provide examples of student work (exemplars) and corresponding (rubrics) to illustrate the range of performance within each level. To help students meet high expectations, teachers show students what high-quality work looks like in relation to the standards (not just in terms of neatness, timeliness, etc.).
- Prior to leaving the class, ensure that students understand how to do their homework. Make sure the homework assignment relates to the standard being taught. Ensure that the homework items are readable and clear and that answer keys (even from the textbook) are correct.
- Ask students to assess their own work using a standards-based rubric and exemplar before turning in their assignments.
- Grade open-ended assignments with a rubric that shows progress toward proficiency on the standard. For additional information on grade, please refer to the section on Grades and effective standards-based reporting.
- Provide written commentary on assignments and assessments, letting students know what they could have done to move up to the next performance level.
- Provide students with an opportunity to revise and redo the work until they demonstrate proficiency.
- Ask the student to explain his or her progress toward the standards at each student/parent conference.
- Reinforce an understanding of standards in regular communications with students and families by comparing student work with a standards-based exemplar and rubric.

Related Links

- Recommendation 12—Partnerships, TCSII.

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Curriculum

According to the online Merriam-Webster Dictionary (Outside Source), the term **curriculum** refers to the courses offered by an educational institution or a set of courses constituting an area of specialization. It is also known as "all the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside the school." In this broader definition, curriculum includes the content standards as well as the softer skills that students need in society such as character, respect, service, and responsibility.

The majority of research studies show that a demanding curriculum has intellectual and practical benefits for students from all backgrounds, races, and ethnicities. A report by the Southern Regional Educational Board (Outside Source) indicates that all students in the middle grades need an academic curriculum that "accelerates their learning, challenges them, and appeals to their interests."

Footnotes

A focus on learning—habits of mind

Most educators and researchers agree that the focus of schooling should be on developing lifelong learners who have cultivated certain habits of mind. These desirable habits include the ability to:

- Examine evidence critically in a text.
- See the world from multiple viewpoints.
- Make connections and detect patterns among ideas and perspectives.
- Imagine alternatives (what if? what else?).
- Understand relevance (what difference does it make?).

To meet the challenge of teaching reading and mathematics while introducing students to critical thinking and developing a taste for lifelong learning, researchers suggest that school personnel must focus on how well students are learning. For example, in Whatever It Takes, the Dufours and their team assert that instruction can no longer be about teaching; it must be about how students learn. To find out how students are learning, the authors propose three key questions:

- What is it we want all students to learn—by grade level, by course, and by unit of instruction?
- How will we know when each student has acquired the intended knowledge and skills?
- How will we respond when students experience initial difficulty so that we can improve upon current levels of learning?

Dufour added the following fourth question in a Web conference in 2006:

- How will we enrich the learning of those who master the concept(s)?

To encourage a focus on learning, the Coalition of Essential Schools (CES) (Outside Source) promotes in The CES Common Principles (Outside Source) the concept of "student-as-worker, rather than the more familiar metaphor of teacher-as-deliverer-of-instructional-services." The coalition also suggests that when teachers act as coaches (rather than traditional dispensers of knowledge), they will be more effective in helping students to learn how to learn and how to teach themselves.

In the Spotlight

Benjamin Holt College Preparatory Academy, Lodi Unified School District, San Joaquin County, a 2009 California Distinguished School

Benjamin Holt College Preparatory Academy is featured on the California Department of Education's Closing the Achievement Gap Web site for its Signature Practice, Exhibitions of Learning, an exemplary practice addressing rigor, and high expectations.

The academy's approach for students in grades six through eleven is based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard and meet serious intellectual challenges.

Ben Holt's—Exhibitions of Learning—is based on the concept that all students should be able to demonstrate mastery and excellence in five areas, which have become the Expected School-wide Learning Results:

1. Personal Responsibility
2. Social Responsibility
3. Critical and Creative Thinking
Exhibitions prepare students for public speaking and media presentations based on what they have learned in their academic courses. Designed for all students to address these skills and five habits, preparation begins in grade six. Integration of college knowledge skills and habits into the middle grades is also part of the design.

For the presentation, students are taught to be punctual, dress professionally, greet the judges, and follow an appropriate script for their grade level. They are judged on personal responsibility, social responsibility, critical and creative thinking, key concepts, and their oral and visual presentation. Following the student presentation, judges discuss each habit on a rubric to determine the scores. Students are required to meet or exceed the standards for all habits, except for sixth and seventh graders, who may have one habit in which they approach the standards. Once the judges compile the results, the student returns to hear the decision.

As a condition of graduation, it is expected that students will pass their exhibitions for each grade level. Students who fail must present on a make-up day or present two exhibitions the following year. The success rate is typically over 90 percent in all grade levels. Students receive pins at the end of the year for successfully completing their grade-level exhibition.

The mantra College for Certain further promotes Ben Holt’s vision to be a thriving educational community where students, parents, staff and other supporters of the school practice the principles of personal responsibility, social responsibility, critical and creative thinking, application of knowledge, and effective communication.

The Closing the Achievement Gap Web site is part of a statewide initiative to close the achievement gap in California. It is an electronic hub of information, research and success stories. One of the features of the Web site is, Signature Practices, used by California Distinguished Schools to improve student achievement and close the achievement gap.

Differentiated instructional methods help teachers to focus on helping every student learn the grade-level content he or she needs by addressing individual interests, learning styles, and aptitudes. To focus on learning, teachers focus instruction on multi-tiered questioning strategies that engage students in a quest requiring higher-level thinking.

Related Links

- Benjamin Holt DataQuest School Profile
- Benjamin Holt College Preparatory Academy (Outside Source)
- Benjamin Holt College Preparatory Academy Signature Practice (Outside Source)
- Practices In the Spotlight Index
- Exhibitions of Learning (PDF; Outside Source)
- Closing the Achievement Gap Web site
- Signature Practices Index

Footnotes


3 Dr. Rick DuFour in a Middle and High School Cyber-Summit presentation on March 1, 2006, to the Curriculum and Instruction Steering Committee of the California County Superintendents Educational Services Association.

4 The CES Common Principles, (Outside Source), Coalition of Essential Schools.
Academic areas

Beyond learning the foundational skills of reading-language arts and mathematics, students need a rich and varied curriculum to be prepared to take courses that fulfill the a-g Guide (Outside Source) of the University of California and California State University necessary for entry to college. Furthermore, as Thomas Friedman points out in *The World is Flat*, American students need to develop mastery in foreign languages, science, and technology to be competitive in the world economy.¹ As a result, students in the middle grades need a full complement of required and recommended courses.

The California *Education Code* guides schools on instructional content. However, it mandates the number of instructional minutes only for physical education. The amount of instructional time for all other subjects is only recommended by California curriculum frameworks and by national organizations. The linked chart on Middle Grades Courses of Study and Instructional Time (2007) (DOC; 107KB; 9pp.) lists recommended instructional minutes for the following courses:

- English language arts
- Mathematics/algebra in eighth grade
- History-social science
- Science
- Physical education
- Health
- Visual and performing arts
- Foreign languages
- Career education

Sometimes it is difficult to work all courses into a student's daily schedule, especially if a student needs many support classes or intensive interventions. If the school schedule precludes students who are enrolled in intensive interventions from taking core courses in science and history/social science or electives, before- and after-school or intersession programs can offer core courses so students can still consider advanced high school courses or college.

The State Board of Education is committed to helping all students master the content standards in the core curriculum: English language arts, mathematics, science, and history/social science.² Without a solid ability to read and comprehend text, a student’s success in most other subjects is unlikely. Likewise, mastery of mathematics prepares students with the logic and skills needed for college and for success in a global society. As a result, reading/language arts and mathematics are often the focus of instructional attention—particularly as school leaders plan the master schedule.

California emphasizes science and history/social science as well as reading and mathematics by using the results from California Standards Tests in those subject areas in calculating a school's Academic Performance Index and by developing frameworks and adopting instructional materials in science and history/social science.

In spite of the importance of all subjects in preparing middle grades students for high school, a recent study on the effects of the No Child Left Behind (NCLB) Act found that 71 percent of school districts nationally reported having reduced instructional time in at least one other subject to make more time for reading and mathematics, the topics tested for NCLB purposes.³ The challenge in the middle grades is to teach reading and mathematics without neglecting any of the other disciplines.

As a result, the goal for middle schools should be to provide all parts of the grade-level curriculum to all students while supporting them with the additional assistance (strategic or intensive intervention) they may need in English language arts or/and mathematics during the regular school day. In addition, effective middle schools provide interest-based electives to keep young adolescents connected and coming to school.

Related Links

- Algebra Offered in the Middle Grades—Frequently Asked Questions, California Department of Education.
- Recommendation 2—Instruction, Assessment, and Intervention, TCSII.
- Recommendation 3—Time, TCSII.
A focus on learning—habits of mind

Curriculum maps

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Curriculum maps

The purpose of a curriculum map is to document the relationship between each component of the curriculum. Curriculum mapping is one tool that helps educators keep track of all the standards for each subject and grade level while ensuring that instructional practices articulate from one grade level to the next. Typically, district curriculum maps provide a picture of what was taught in each academic subject during a school year. The maps help district curriculum specialists (1) identify redundancies or gaps in articulation between one grade and the next and (2) review assessment methods and outcomes. In addition, curriculum maps help identify opportunities for cross-curricular integration.

To develop a curriculum map, a departmental professional learning community (including teacher representatives from each grade level and academic area) first incorporates the state-adopted content standards into a yearly lesson plan schedule. At the end of a semester or year, the entire departmental team can refine the map based on discussions about both test results and the effectiveness of the pacing guide in helping students learn the grade-level standards.

According to Education World (Outside Source), creating and working with curriculum maps is a seven-step process:

- Phase 1: Data collection
- Phase 2: A review of all maps by all teachers
- Phase 3: Small mixed-group reviews in which groups of five to eight diverse faculty members share individual findings
- Phase 4: Large-group comparisons in which all faculty members gather to examine the findings of the smaller groups
- Phase 5: Identification of immediate revision points and creation of a timetable for resolution
- Phase 6: Identification of points requiring additional research and planning and a timetable for resolution of those points
- Phase 7: Planning for the next review cycle


Related Link

- Pacing guides, Recommendation 1—Rigor, TCSII.

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Backward mapping

**Backward design** or backward mapping is a way for teachers to begin at the end: What are the intended student learning outcomes? How will students demonstrate their achievement [of the standard/lesson]? By knowing learning outcomes at the beginning of lesson planning, teachers can design or select an assessment by which students can demonstrate mastery of the standards. Teachers then work backwards to design the instructional activities that support the intended learning. It is crucial that learning goals (standards) determine assessments, which determine lessons and resources. Assessing the intended learning drives the instruction and is not an afterthought.

The following chart from the original *Taking Center Stage* illustrates the importance of backward mapping in a standards-based system.

### A Comparison of Traditional Practice vs. a Standards-Based Education System

<table>
<thead>
<tr>
<th>Traditional Practice</th>
<th>Standards-Based Education System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select a topic from the curriculum.</td>
<td>Select and then analyze the standard(s) to be met.</td>
</tr>
<tr>
<td>Design instructional activities.</td>
<td>Design or select an assessment through which students can demonstrate mastery of the standard(s); determine the required performance level, if it is not already given.</td>
</tr>
<tr>
<td>Deliver a lesson.</td>
<td>Identify what students must know and be able to do in order to perform well on the assessment.</td>
</tr>
<tr>
<td>Design and administer an assessment.</td>
<td>Plan and deliver instructional activities that include direct instruction and teacher-student interaction. This process helps all students gain the knowledge and skill(s) identified in the standards.</td>
</tr>
<tr>
<td>Give a grade or feedback.</td>
<td>Provide all students with adequate opportunities to learn and practice the necessary skills and knowledge.</td>
</tr>
<tr>
<td>Move on to a new topic.</td>
<td>Assess students and examine their results to plan further instruction or individual support, if needed. If appropriate, give a grade or other feedback.</td>
</tr>
</tbody>
</table>

**Related Links**

- Aiming High Toolkit: Promoting Standards-Based Education to Improve Student Achievement (DOC; 3 MB; 215pp.), California Department of Education, 76.
- Backwards Mapping Tool (Outside Source), Technology Information Center for Administrative Leadership (TICAL).

**Footnotes**

Pacing guides

In contrast to curriculum maps, pacing guides are like timelines showing what each teaching team plans to cover over the course of a year. Each subject area follows a logical sequence within a grade level and between grade levels. To help teachers provide the same content to each student no matter which school he or she attends (an equity issue addressed in Recommendation 7—Access, the State Board-adopted instructional materials come with a publisher’s suggested planning guide. The materials sequence the content standards in a logical and progressive manner. It is the responsibility of both the district and the school to collaboratively review and modify the publisher’s planning guides to include in the local district pacing guides. To develop pacing guides for each grade-level academic area, district teams use the following resources:

- A publisher’s planning guide, which may include suggestions for pacing instruction.
- The district benchmark assessment schedule.
- The expertise of subject-matter teachers.
- Any developed curriculum maps.
- Information on Middle Grades Courses of Study and Instructional Time (2007) (DOC; 106KB; 9pp) for a subject area.

The pacing guides include a schedule of when assessments will be administered. The assessments help teachers know what students are learning, who is learning at the suggested pace, and who is not learning at the suggested pace. Although failure is not an option, slowing the pace for struggling students is also not a viable option as it is unfair to proficient and advanced students. It is critical that schools and districts develop a plan to keep students learning at an engaging pace and support those who are not keeping pace by providing appropriate instructional support, such as additional classes, tutoring, and small-group remediation.

In the Spotlight

Rancho Cucamonga Middle School, Cucamonga School District, a 2006 On the Right Track School
Aligning each grade-level course to the standards and developing pacing and sequencing across the school has helped this school formerly designated a Program Improvement (PI) school to make impressive gains in student achievement—enough to be designated a 2006 On the Right Track school. After teaching teams integrated all the standards in the curriculum, they established the scope and sequence of every standard. Then they created a yearlong calendar (by course and grade level) so that teachers could teach all standards covered on the California Standards Tests by April, leaving two weeks for review of concepts that students missed on district benchmark assessments. Teachers cover the remaining standards between April and June.

Because of the close alignment of instruction and the standards, school staff members have realized the following benefits:

- **Fairness:** All students cover the same material. If a student transfers to another class, he or she does not risk missing out on instruction.
- **Consistency:** All students cover all the standards.
- **Ease in planning:** Many teachers find that collaboration makes both lesson planning and fill-in by substitutes much easier.

- Rancho Cucamonga Middle DataQuest School Profile
- Rancho Cucamonga Middle School (Outside Source)
- On the Right Track 6
Backward mapping

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Grades and effective standards-based reporting

The link between standards-based education and accountability raises the question of grades and the importance of accurately reporting progress to students and parent/guardians. In *Transforming Classroom Grading*, Robert Marzano says, "A single letter grade or a percentage score is not a good way to report student achievement in any subject area because it simply cannot present the level of detailed feedback necessary for effective learning."\(^1\)

One problem with traditional grading is that it is often subjective and combines all the course standards under a single grade. Since each course covers a number of standards per quarter or semester, a single end-of-term grade does not give either parents or students an adequate picture of progress on all standards. As a result, it is difficult to convert measures of proficiency on a variety of standards into one letter grade. To help schools transition to a standards-based reporting system, *Taking Center Stage* included a Prototype Student Performance Report as a model for a standards-based report card.\(^2\)

Another problem with traditional grades is that they are not consistent from one teacher to the next. One teacher’s A might signify grade-level excellence, while another teacher, grading a struggling student, might give an A showing that the student tried hard and made good progress.

Open-ended questions and assignments (in contrast to multiple-choice options) raise another challenge in grading. Standards-based rubrics provide a more objective means of assessing student performance levels. Rubrics generally define specific criteria—and often show exemplars—to indicate levels of proficiency on constructed-response tasks. *Taking Center Stage* included an example of a Four-Point Scoring Guide (Appendix 3-G), or rubric, for writing. The California Standards Test Teacher Guide for the 2008 California Standards Test in Grade Seven (PDF; 1.32KM; 73pp.) includes both exemplars and explanations of how sample student work was scored at each level. The guides for the California Standards Tests in writing from 2005 through 2008 provide multiple sample student responses at each score point for all writing tasks administered.

Although rubrics work well for writing and other open-ended tasks, different types of scoring may be needed for courses such as mathematics. Rubrics may not be appropriate to indicate end-of-course proficiency levels on all subjects.

Conversion from a letter grading system to a standards-based reporting system is challenging. Parents expect letter grades, which often help to determine college admission or to provide motivation for sports and participation in extracurricular activities. However, changing from a traditional grading practice to a standards-based system will provide more reliable information that measures all students fairly on comparable scales. Standards-based reporting more accurately shows parents and students specific areas of proficiency as well as areas needing improvement, but it takes time to develop.

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**In the Spotlight**

**Galt Joint Union Elementary School District**
Galt developed a paper explaining Standards-Based Middle School Report Cards. The paper provides the background about how the district devised the report cards. It also explains the performance levels (including those for work habits and conduct) as well as provides a sample of how the report card would work for a fictional student.

**McKinleyville Middle School, McKinleyville Union School District, a 2006 Schools to Watch™-Taking Center Stage Model School**
McKinleyville implemented an online standards-based report system and standards-based strands for all intervention lessons and classes. McKinleyville has deliberately chosen not to implement a dual system but to use only standards-aligned reports.

**Ocean View Junior High School, Ocean View Elementary School District, is a 2006 On the Right Track School**
Ocean View also developed a standards-based report card to emphasize the importance of standards-based instruction.
Silverado Middle School, Dry Creek Joint School District, a 2003 Schools to Watch™-Taking Center Stage Model School
Silverado developed a dual reporting system using both a standards-based report card and one reporting traditional grades.

- Galt Joint Union DataQuest Profile
- Galt Joint Union Elementary School District (Outside Source)
- Standards-Based Middle School Report Cards

- McKinleyville Middle DataQuest School Profile
- McKinleyville Middle School (Outside Source)
- Schools to Watch-Taking Center Stage—Model School-Visitor’s Guide: McKinleyville Middle School (PDF; Outside Source)

- Ocean View Junior High DataQuest School Profile
- Ocean View Junior High School (Outside Source)
- On the Right Track 6

- Silverado Middle DataQuest School Profile
- Silverado Middle School (Outside Source)
- Schools to Watch-Taking Center Stage—Model School-Visitor’s Guide: Silverado Middle School (PDF; Outside Source)
- Schools to Watch™-Taking Center Stage

Some middle schools have implemented a grading system known as the ABCI program that includes a no failure option. The intent of the ABCI no-failure system is to overcome complacency by counting only A, B, and C grades. Any assignment or test that earns less than a C receives an I for incomplete. Students must attend after-school classes, tutoring, or other support options to make up the assignment. Teachers collaborate on modifying instruction to support students in achieving the higher expectations. School staff teams who agree to this system must take into account what to do with students who earn an incomplete at the end of a semester or course. Students must understand that they cannot go on to high school without completing the required courses and that summer or intersessions will be required before they can pass to the next grade level.

Discussions about grading and standards-based reporting can help to ensure consistency and fairness for all students in a school. For example, the teaching team can discuss ideas such as those in Rick Wormeli’s 2006 book about differentiated instruction. Wormeli, a popular lecturer, writer, and former teacher, warns against ten grading practices that dilute a grade’s validity and effectiveness:

- Penalizing students for multiple attempts at mastery.
- Grading practice (daily homework) as students come to know concepts (feedback, not grading, is needed).
- Withholding scaffolding or other supports to help the student gain mastery (except on final tests).
- Group grades.
- Incorporating nonacademic factors such as behavior, attendance, and effort into the final grade.
- Assessing students in ways that do not accurately indicate students’ mastery (student responses are hindered by the assessment format).
- Grading on a curve.
- Allowing extra credit and bonus points.
- Defining supposedly criterion-based grades in terms of norm-referenced descriptions (above average, average, etc.).
- Recording zeros on the 100.0 scale for work not done. For example, many teachers will record 50 percent or even 20 percent for incomplete work, realizing that a few zeros will make it nearly impossible for a student to earn enough points to pass if he or she starts working harder. Anything less than 50 percent still earns an F grade on the missing assignment but does not lead the student to believe it is hopeless to keep trying.
Discussion Point: If a teacher uses the no zero option for incomplete work, the issue still arises of what to do about those who skip assignments completely. Rewarding students by granting points despite missing assignments sends the wrong message to those students who try but fail to complete or understand their work. Teams need to develop consistent policies that all teachers are willing to enforce when dealing with incomplete, missing, or completely wrong assignments. One option is to give either a 1 or a zero on homework, with total homework assignments counting for the difference between a plus or a minus grade. Other incentive programs such as field trips or dance passes might be available only for those who have completed all assignments.

In the Spotlight

The 100 Percent Club, or The Perfect 10s
Some middle schools have used incentive systems, such as The Perfect 10 Club, to encourage homework completion and good citizenship. In one example, all students begin a semester with 100 merit points. Only those students who maintain 95 or above may attend dances or other special events. Citations result in deduction of points for small infractions (one-point citations) or for as many as five points for California Education Code infractions. Teachers use a three-part form to issue and track citations: one copy to the student, one to an office assistant who enters the data each day in the computer, and one for the office file. To encourage team spirit, students can earn back merit points through attendance at the homework/after-school study center or through school-approved service or make-up assignments. However, when students drop below 90 points, the computerized system automatically generates a letter to the parents and mandatory lunch detention. At the end of the semester, those students with a Perfect 10 (100 points) join in the Perfect 10 celebration. Perfect attendance, completion of all assignments, and good citizenship are honored at the celebration.

Tell us about your positive discipline and incentives at your school. Please Share Your Ideas!
Conclusion

The middle grades present students with increased demands for critical thinking, organizational skills (to manage homework and assignments), and social competence. Instituting rigor, or academic excellence, in the middle grades revolves around several significant elements.

First, all students must know that the adults in their home, school, and community hold high expectations that students can attain grade-level knowledge and skills as measured by California's rigorous standards.

Second, students must witness daily evidence that adults in the learning community will provide needed support to learn—whether understanding comes quickly or additional explanations or time is needed to practice new concepts.

Third, middle grades students realize that they have equal access to a system that makes sense. The grade-level content standards, tests, and learning supports move in a logical, skill-building progression that is the same no matter which teacher leads the class.

Finally, standards-based learning recognizes the developmental characteristics of young adolescents and delivers academic rigor through culturally relevant curriculum and instruction. Refer to the sections on Adolescent Development associated with each Recommendation.

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