COMMON CORE STATE STANDARDS for Literacy in All Subjects



Wisconsin Department of Public Instruction

COMMON CORE STATE STANDARDS for Literacy in All Subjects

Agriculture, Art, Business and Information Technology, Dance, English Language Arts, Entrepreneurship, Environmental Education, Family and Consumer Science, Health Science Occupations, Marketing, Mathematics, Music, Personal Financial Literacy, Physical and Health Education, Science, Social Studies, Technology and Engineering Education, Theater, World Languages and all other subjects.



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Madison, Wisconsin

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SECTION I

Wisconsin's Approach to Academic Standards



Foreword

On June 2, 2010, I formally adopted the Common Core State Standards for Mathematics and English Language Arts, including the Literacy in History/Social Studies, Science, and the Technical Subjects for Wisconsin.

The adoption of the Common Core State Standards capped a one year effort led by the Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA) to define K-12 academic standards that are aligned with college and work expectations, inclusive of rigorous content and application, and are internationally benchmarked. Staff from state departments of education reviewed and provided feedback on early drafts leading to a public comment period for citizens and educators. As of June 2011, 42 states have adopted the Common Core State Standards in this voluntary effort to bring academic consistency across the states.

Adoption of the standards, however, is the easy task. Implementing them through engaging instruction coupled with rigorous learning activities and assessment is the hard work. I applaud the efforts that are underway at the DPI, local school districts, Cooperative Educational Service Agencies (CESAs), professional organizations, and colleges and universities to bring the Common Core State Standards to teachers across Wisconsin.

The first step to implementation requires that teachers know and understand the Common Core State Standards. This document provides guidance on the relationship between the Common Core State Standards and our vision of Every Child a Graduate, supporting all students through Response to Intervention, and the responsibility that all teachers have for developing reading, writing, thinking, speaking, and listening skills.

One of the most distinguishing features of the Common Core State Standards is the emphasis directed to literacy in all of the disciplines. For students to be career and college ready, they must be proficient in reading and writing complex informational and technical text. This means that instruction in every classroom focuses on both the content and the reading and writing skills that students need to demonstrate learning in the discipline.

To support and ensure implementation, we will partner with school districts, universities, professional organizations, CESAs, and CCSSO to develop curriculum resources and highlight effective practices. Wisconsin educators are the best, both in their content knowledge and commitment to high-quality instruction. Combining helpful resources with effective practices used by quality educators leads to success for Wisconsin students.

Tony Evers, PhD State Superintendent



"The adoption of Common Core State Standards defines K-12 academic standards that are aligned with college and work expectations, inclusive of rigorous content and application."



Acknowledgements

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Thanks also to the CESA Statewide Network and Commissioner Jesse Harness for partnering to keep the CCSS message consistent statewide, and to the CESA School Improvement Specialists Network for their role in producing and providing high quality professional development statewide.

Also thanks to the many staff members across divisions and teams at DPI who have collaboratively contributed their time and talent to this project.

Finally, a special thanks to Wisconsin educators and citizens who provided public comment and feedback to drafts of the Common Core State Standards, served on statewide standards leadership groups, and supported implementation of standards.

Purpose of the Document

To assist Wisconsin education stakeholders in understanding and implementing the **Common Core State Standards (CCSS)**, Wisconsin Department of Public Instruction (DPI) has developed guidance to be used along with the CCSS. These materials are intended to provide further direction and should not be viewed as administrative rule. This publication provides a vision for student success, guiding principles for teaching and learning, and locates the standards within a multi-level system of support where high quality instruction, balanced assessment, and collaboration function together for student learning. Information on the design and content of the CCSS is included, as is a guide to assist with facilitating local conversations about these internationally-benchmarked standards and how they impact instruction.

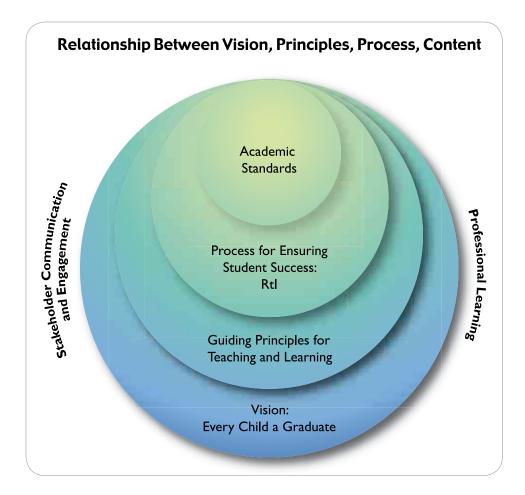




Aligning for Student Success

To build and sustain schools that support every student in achieving success, educators must work together with families, community members, and business partners to connect the most promising practices in the most meaningful contexts. Major statewide initiatives focus on high school graduation, Response to Intervention (Rtl), and the *Common Core State Standards for English Language Arts, Disciplinary Literacy, and Mathematics.* While these are often viewed as separate efforts or

initiatives, each of them is connected to a larger vision of every child graduating college and career ready. The graphic below illustrates how these initiatives function together for a common purpose. Here, the vision and set of guiding principles form the foundation for building a supportive process for teaching and learning rigorous and relevant content. The following sections articulate this integrated approach to increasing student success in Wisconsin schools and communities.



A Vision: Every Child a Graduate

In Wisconsin, we are committed to ensuring every child is a graduate who has successfully completed a rigorous, meaningful, 21st century education that will prepare him or her for careers, college and citizenship. Though our public education system continues to earn nation-leading graduation rates, a fact we can be proud of, one in ten students drop out of school, achievement gaps are too large, and overall achievement could be even higher. This vision for every child a graduate guides our beliefs and approaches to education in Wisconsin.

Guided By Principles

All educational initiatives are guided and impacted by important and often unstated attitudes or principles for teaching and learning. The Guiding Principles for Teaching and Learning emerge from research and provide the touchstone for practices that truly affect the vision of every child a graduate prepared for college and career. When made transparent, these principles inform what happens in the classroom, the implementation and evaluation of programs, and most important, remind us of our own beliefs and expectations for students.



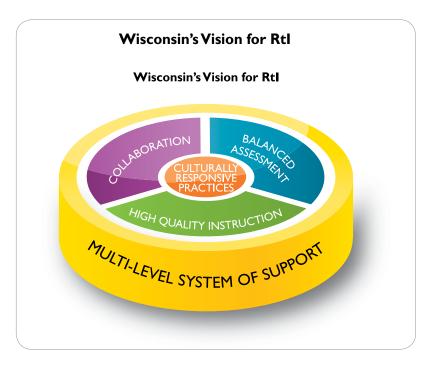
Ensuring a Process for Student Success

To ensure that every child in Wisconsin graduates prepared for college and career, schools need to provide high quality instruction, balanced assessment and collaboration reflective of culturally responsive practices. The Wisconsin Response to Intervention (Rtl) framework helps to organize the components of a system designed to support student learning. Below, the three essential elements of high quality instruction, balanced assessment and collaboration interact within a multi-level system of support to ensure each student receives what he or she needs to access higher levels of academic and behavioral success.

At the school or district level, programs, initiatives and practices related to high quality instruction, balanced assessment and collaboration can be more powerful when organized or braided to function systemically to support all students. The focus must be on a comprehensive approach to student learning.

Connecting to Content: The Common Core State Standards

Within this vision for increased student success, rigorous, internationallybenchmarked academic standards provide the content for high quality curriculum and instruction, and for a balanced assessment system aligned to those standards. With the adoption of the CCSS, Wisconsin has the tools to build world-class curriculum, instruction and assessments for greater student learning. The CCSS articulate what we teach so that educators can focus on how instruction can best meet the needs of each student. When implemented within a multi-level system of support, the CCSS can help to ensure that every child will graduate prepared for college, work and a meaningful life.



"Educators must work together with families, community members, and business partners to connect the most promising practices in the most meaningful contexts."



Guiding Principles for Teaching and Learning

These guiding principles are the underpinnings of effective teaching and learning for every Wisconsin teacher and every Wisconsin student. They are larger than any one initiative, process or set of standards. Rather, they are the lens we look through as we identify teaching and learning standards, design assessments and determine what good instruction looks like. These principles recognize that every student has the right to learn and are built upon three essential elements: high quality instruction, balanced assessment, and collaboration. They are meant to align with academic excellence, rigorous instruction, and college and career readiness for every Wisconsin student. For additional research, resources and probing questions to support professional learning on the six principles, please see the Wisconsin Research and Resources section of this document.

Every student has the right to learn.

It is our collective responsibility as an education community to make certain each child receives a high-quality, challenging education designed to maximize potential, an education that reflects and stretches his or her abilities and interests. This belief in the right of every child to learn forms the basis of equitable teaching and learning. The five principles that follow cannot exist without this commitment guiding our work.

Instruction must be rigorous and relevant.

To understand the world in which we live, there are certain things we all must learn. Each school subject is made up of a core of essential knowledge that is deep, rich, and vital. Every student, regardless of age or ability, must be taught this essential knowledge. What students learn is fundamentally connected to how they learn, and successful instruction blends the content of a discipline with processes of an engaging learning environment that changes to meet the dynamic needs of all students.



Purposeful assessment drives instruction and affects learning.

Assessment is an integral part of teaching and learning. Purposeful assessment practices help teachers and students understand where they have been, where they are, and where they might go next. No one assessment can provide sufficient information to plan teaching and learning. Using different types of assessments as part of instruction results in useful information about student understanding and progress. Educators should use this information to guide their own practice and in partnership with students and their families to reflect on learning and set future goals.

Learning is a collaborative responsibility.

Teaching and learning are both collaborative processes. Collaboration benefits teaching and learning when it occurs on several levels: when students, teachers, family members, and the community collectively prioritize education and engage in activities that support local schools, educators, and students; when educators collaborate with their colleagues to support innovative classroom practices and set high expectations for themselves and their students; and when students are given opportunities to work together toward academic goals in ways that enhance learning.

Students bring strengths and experiences to learning.

Every student learns. Although no two students come to school with the same culture, learning strengths, background knowledge, or experiences, and no two students learn in exactly the same way, every student's unique personal history enriches classrooms, schools, and the community. This diversity is our greatest education asset.

Responsive environments engage learners.

Meaningful learning happens in environments where creativity, awareness, inquiry, and critical thinking are part of instruction. Responsive learning environments adapt to the individual needs of each student and encourage learning by promoting collaboration rather than isolation of learners. Learning environments, whether classrooms, schools, or other systems, should be structured to promote engaged teaching and learning.



Reaching Every Student; Reaching Every Discipline

Reaching Every Student

The CCSS set high, clear and consistent expectations for all students. In order to ensure that all students can meet and exceed those expectations, Wisconsin educators provide flexible and fluid support based on student need. Each student brings a complex system of strengths and experiences to learning. One student may have gifts and talents in mathematics and need additional support to reach gradelevel standards in reading. A student may be learning English as a second language while remaining identified for gifted services in science. The following statements provide guidance for how to ensure that the CCSS provide the foundation for learning for every student in Wisconsin, regardless of their unique learning needs.

Application of Common Core State Standards for English Language Learners

The National Governors Association Center for Best Practices and the Council of Chief State School Officers strongly believe that all students should be held to the same high expectations outlined in the Common Core State Standards. This includes students who are English language learners (ELLs). However, these students may require additional time, appropriate instructional support, and aligned assessments as they acquire both English language proficiency and content area knowledge.

ELLs are a heterogeneous group with differences in ethnic background, first language, socioeconomic status, quality of prior schooling, and levels of English language proficiency. Effectively educating these students requires pre-assessing each student instructionally, adjusting instruction accordingly, and closely monitoring student progress. For example, ELLs who are literate in a first language that shares cognates with English can apply first-language vocabulary knowledge when reading in English; likewise ELLs with high levels of schooling can often bring to bear conceptual knowledge developed in their first language when reading in English. However, ELLs with limited or interrupted schooling will need to acquire background knowledge prerequisite to educational tasks at hand. Additionally, the development of native-like proficiency in English takes many years and may not be achieved by all ELLs especially if they start schooling in the US in the later grades. Teachers should recognize that it is possible to achieve the standards for reading and literature, writing and research, language development and speaking and listening without manifesting native-like control of conventions and vocabulary.

English Language Arts

The Common Core State Standards for English Language Arts (ELA) articulate rigorous grade-level expectations in the areas of reading, writing, speaking, listening to prepare all students to be college and career ready, including English language learners. Second-language learners also will benefit from instruction about how to negotiate situations outside of those settings so they are able to participate on equal footing with native speakers in all aspects of social, economic, and civic endeavors.

ELLs bring with them many resources that enhance their education and can serve as resources for schools and society. Many ELLs have first language and literacy knowledge and skills that boost their acquisition of language and literacy in a second language; additionally, they bring an array of talents and cultural practices and perspectives that enrich our schools and society. Teachers must build on this enormous reservoir of talent and provide those students who need it with additional time and appropriate instructional support. This includes language proficiency standards that teachers can use in conjunction with the ELA standards to assist ELLs in becoming proficient and literate in English. To help ELLs meet high academic standards in language arts it is essential that they have access to:

- Teachers and personnel at the school and district levels who are well prepared and qualified to support ELLs while taking advantage of the many strengths and skills they bring to the classroom;
- Literacy-rich school environments where students are immersed in a variety of language experiences;
- Instruction that develops foundational skills in English and enables ELLs to participate fully in grade-level coursework;



- Coursework that prepares ELLs for postsecondary education or the workplace, yet is made comprehensible for students learning content in a second language (through specific pedagogical techniques and additional resources);
- Opportunities for classroom discourse and interaction that are well-designed to enable ELLs to develop communicative strengths in language arts;
- Ongoing assessment and feedback to guide learning; and
- Speakers of English who know the language well enough to provide ELLs with models and support.

Application to Students with Disabilities

The Common Core State Standards articulate rigorous grade-level expectations in the areas of mathematics and English language arts. These standards identify the knowledge and skills students need in order to be successful in college and careers.

Students with disabilities, students eligible under the Individuals with Disabilities Education Act (IDEA), must be challenged to excel within the general curriculum and be prepared for success in their post-school lives, including college and/or careers. These common standards provide an historic opportunity to improve access to rigorous academic content standards for students with disabilities. The continued development of understanding about research-based instructional practices and a focus on their effective implementation will help improve access to mathematics and English language arts (ELA) standards for all students, including those with disabilities. Students with disabilities are a heterogeneous group with one common characteristic: the presence of disabling conditions that significantly hinder their abilities to benefit from general education (IDEA 34 CFR §300.39, 2004). Therefore, how these high standards are taught and assessed is of the utmost importance in reaching this diverse group of students.

In order for students with disabilities to meet high academic standards and to fully demonstrate their conceptual and procedural knowledge and skills in mathematics, reading, writing, speaking and listening (English language arts), their instruction must incorporate supports and accommodations, including:

- Supports and related services designed to meet the unique needs of these students and to enable their access to the general education curriculum (IDEA 34 CFR §300.34, 2004).
- An Individualized Education Program (IEP)¹ which includes annual goals aligned with and chosen to facilitate their attainment of grade-level academic standards.
- Teachers and specialized instructional support personnel who are prepared and qualified to deliver high-quality, evidence-based, individualized instruction and support services.

Promoting a culture of high expectations for all students is a fundamental goal of the Common Core State Standards. In order to participate with success in the general curriculum, students with disabilities, as appropriate, may be provided additional supports and services, such as:

- Instructional supports for learning, based on the principles of Universal Design for Learning (UDL),² which foster student engagement by presenting information in multiple ways and allowing for diverse avenues of action and expression.
- Instructional accommodations (Thompson, Morse, Sharpe & Hall, 2005), changes in materials or procedures, which do not change the standards but allow students to learn within the framework of the Common Core.
- Assistive technology devices and services to ensure access to the general education curriculum and the Common Core State Standards.

Some students with the most significant cognitive disabilities will require substantial supports and accommodations to have meaningful access to certain standards in both instruction and assessment, based on their communication and academic needs. These supports and accommodations should ensure that students receive access to multiple means of learning and opportunities to demonstrate knowledge, but retain the rigor and high expectations of the Common Core State Standards.



Implications for the Common Core State Standards for Students with Gifts and Talents

The CCSS provide a roadmap for what students need to learn by benchmarking expectations across grade levels. They include rigorous content and application of knowledge through higher-order skills. As such, they can serve as a foundation for a robust core curriculum, however, students with gifts and talents may need additional challenges or curricular options. In order to recognize what adaptations need to be made or what interventions need to be employed, we must understand who these students are.

According to the National Association for Gifted Children (2011), "Giftedness, intelligence, and talent are fluid concepts and may look different in different contexts and cultures" (para. 1). This means that there are students that demonstrate high performance or have the potential to do so in academics, creativity, leadership, and/or the visual and performing arts. Despite this diversity there are common characteristics that are important to note.

Students with gifts and talents:

- Learn at a fast pace.
- Are stimulated by depth and complexity of content.
- Make connections.

These traits have implications for how the Common Core State Standards are used. They reveal that as curriculum is designed and instruction, is planned there must be:

- Differentiation based on student readiness, interest, and learning style:
- Pre-assessing in order to know where a student stands in relation to the content that will be taught (readiness), then teach those standards that the student has not mastered and enrich, compact, and/or accelerate when standards have been mastered. This might mean using standards that are beyond the grade level of the student.
- Knowledge of our students so we are familiar with their strengths, background knowledge, experiences, interests, and learning styles.

- Flexible grouping to provide opportunities for students to interact with peers that have similar abilities, similar interests, and similar learning styles (homogenous grouping), as well as different abilities, different interests, and different learning styles (heterogeneous grouping).
- Differentiation of content, process, and product.
- Use of a variety of materials (differentiating content) to provide challenge. Students may be studying the same concept using different text and resources.
- Variety of tasks (differentiating process). For example in a science lesson about the relationship between temperature and rate of melting, some students may use computer-enhanced thermometers to record and graph temperature so they can concentrate on detecting patterns while other students may graph temperature at one-minute intervals, then examine the graph for patterns.
- Variety of ways to demonstrate their learning (differentiating product). These choices can provide opportunities for students with varying abilities, interests, and learning styles to show what they have discovered.
- Adjustment to the level, depth, and pace of curriculum.
- Compact the curriculum to intensify the pace.
- Vary questioning and use creative and critical thinking strategies to provide depth.
- Use standards beyond the grade level of the students. Since the CCSS provide a K-12 learning progression, this is easily done.
- Accelerate subject areas or whole grades when appropriate.
- Match the intensity of the intervention with the student's needs. This means that we must be prepared to adapt the core curriculum and plan for a continuum of services to meet the needs of all students, including those with gifts and talents.



References

Individuals with Disabilities Education Act (IDEA), 34 CFR §300.34 (a). (2004).

Individuals with Disabilities Education Act (IDEA), 34 CFR §300.39 (b)(3). (2004).

National Association for Gifted Children (2010). Redefining Giftedness for a New Century Shifting the Paradigm. Retrieved from http://www.nagc.org/index.aspx?id=6404.

National Association for Gifted Children (2011). What is giftedness? Retrieved from http://nagc.org/index.aspx?id=574.

Sousa, D.A. (200). How the gifted brain learns. Thousand Oaks, CA: Corwin Press.

Thompson, Sandra J., Amanda B. Morse, Michael Sharpe, and Sharon Hall. "Accommodations Manual: How to Select, Administer and Evaluate Use of Accommodations and Assessment for Students with Disabilities," 2nd Edition. Council for Chief State School Officers, 2005 http://www.ccsso.org/content/pdfs/AccommodationsManual.pdf . (Accessed January, 29, 2010).





Reaching Every Discipline Wisconsin's Approach to Disciplinary Literacy

Background

In Wisconsin, we hold the vision that every child must graduate ready for post-secondary education and the workforce. To achieve this vision, students must develop the skills to think, read, communicate, and perform in many academic contexts. If students must develop these specific skills, every educator must then consider how students learn to read, write, think, speak and listen in their discipline.

The kinds of reading, writing, thinking, speaking and listening required in a marketing course are quite different when compared with the same processes applied in an agriculture, art or history course. For example, a student may have successfully learned the vocabulary and content needed to score an A on a freshman biology test, but finds he still struggles to understand relevant articles from *Popular Science Magazine*, or use his science vocabulary to post respected responses on an environmental blog he reads at home. This student knows biology content, but lacks the disciplinary literacy to think, read, write, and speak with others in this field. Without this ability, his content knowledge is limited only to the classroom, and cannot extend to the real world around him.

In Wisconsin, disciplinary literacy is defined as the confluence of content knowledge, experiences, and skills merged with the ability to read, write, listen, speak, think critically and perform in a way that is meaningful within the context of a given field.

Teaching for disciplinary literacy ensures that students develop the skills to use the deep content knowledge they learn in school in ways that are relevant to each of them, and to the world around them.

In 2009, The State Superintendent's Adolescent Literacy Plan offered recommendations for how to begin professional conversations about disciplinary literacy in Wisconsin. The plan recommended Wisconsin write standards for literacy that were specific to each discipline, and emphasized the need to accompany these literacy standards with discipline-specific professional learning.

Wisconsin's Approach to Disciplinary Literacy

In 2010, the Council of Chief State School Officers (CCSSO) responded to this need for standards by publishing Common Core State Standards for Literacy in History/Social Studies, Science and Technical Subjects in grades 6-12. These standards were adopted by State Superintendent Tony Evers in June 2010. Wisconsin applauds this bold move to begin a national conversation on disciplinary literacy, and recognizes the need to broaden this effort to include all disciplines, and every educator in every grade level.

The ability to read, write, think, speak, and listen, in different ways and for different purposes begins early and becomes increasingly important as students pursue specialized fields of study in high school and beyond. These abilities are as important in mathematics, engineering and art courses as they are in science, social studies and English.

To further solidify Wisconsin's expanded approach to disciplinary literacy, a statewide leadership team comprised of K-16 educators from diverse subject areas was convened. A set of foundations, was established and directs Wisconsin's approach to disciplinary literacy.

This document begins the conversation about literacy in all subjects. It will come to life when presented to teachers and they are able to showcase their subjects' connection to literacy in all subjects which will bring the literacy standards to life for their community of learners.





Wisconsin Foundations for Disciplinary Literacy

To guide understanding and professional learning, a set of foundational statements, developed in concert with Wisconsin's Guiding Principles for Teaching and Learning, directs Wisconsin's approach to disciplinary literacy.

- Academic learning begins in early childhood and develops across all disciplines.
- Content knowledge is strengthened when educators integrate discipline-specific literacy into teaching and learning.
- The literacy skills of reading, writing, listening, speaking and critical thinking improve when content-rich learning experiences motivate and engage students.
- Students demonstrate their content knowledge through reading, writing, listening, and speaking as part of a content literate community.

Wisconsin's Common Core Standards for Literacy in All Subjects

With the Wisconsin Foundations for Disciplinary Literacy, Wisconsin expands the Common Core State Standards for Literacy in History/ Social Studies, Science and Technical Subjects, to include every educator in every discipline and at every level. The Common Core Standards for English Language Arts include the Literacy Standards in History/ Social Studies, Science and Technical Subjects as well as other relevant standards materials, resources, and research that support disciplinespecific conversations across all content areas and grade levels.

The Common Core State Standards for Literacy in all Subjects is included as part of every set of Wisconsin standards as each discipline is reviewed in accordance with the process for Wisconsin standards revision http://www.dpi.wi.gov/standards.This document includes relevant resources and research that may be helpful in advancing school and district conversations, and can also be downloaded at www.dpi.wi.gov/standards or purchased as a stand-alone document through www.dpi.wi.gov/publications.





Wisconsin's Approach to Literacy in All Subjects



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What is Disciplinary Literacy?

Literacy, the ability to read, write, listen, speak, think critically and perform in different ways and for different purposes, begins to develop early and becomes increasingly important as students pursue specialized fields of study in high school and beyond. The Common Core State Standards (CCSS) for Literacy in Science, Social Studies, History, and the Technical Subjects are connected to College and Career Readiness Standards that guide educators as they strive to help students meet the literacy challenges within each particular field of study. This national effort is referred to as disciplinary literacy.

In Wisconsin, disciplinary literacy is defined as the confluence of content knowledge, experiences, and skills merged with the ability to read, write, listen, speak, think critically and perform in a way that is meaningful within the context of a given field.

These abilities are important in ALL courses and subjects. While the Common Core State Standards (CCSS) for Literacy in Science, Social Studies, History, and the Technical Subjects provide standards for crossdiscipline reading and writing in grades 6-12, Wisconsin recognizes the need to broaden this effort and include **all disciplines and every educator in every grade level K-12.** This literacy focus must begin as soon as children have access to formal education and continue intentionally as college and career readiness goals advance for all children in Wisconsin.

To address this expanded definition and approach to disciplinary literacy, excerpts from the K-5 Common Core State Standards for English Language Arts are included in this document. Elementary classroom teachers build the foundational literacy skills necessary for students to access all learning. Additionally, they develop content specific to deep literary study, oratory tradition and linguistic analysis; skills specific to English language arts. Literacy reaches beyond this knowledge in one content area to include reading, writing, listening, speaking and thinking critically in each discipline beginning at an early age. The applicable K-5 standards help educators in Wisconsin build a ladder of skills and dispositions that lead to accelerated achievement across disciplines and will be included in every content-specific standards document into the future.

Why is disciplinary literacy important?

The modern global society, of which our students are a part, requires postsecondary learning. An analysis of workforce trends by Georgetown University economist Anthony Carnevale and his colleagues found that nearly 60 percent of all job openings in 2007 required some postsecondary education; postsecondary success depends on students' ability to comprehend and produce the kinds of complex texts found in all disciplines. Therefore, the economic future of our state, as well as our students and their success as productive citizens and critical thinkers link to disciplinary literacy.

Textbooks, articles, manuals and historical primary source documents create specialized challenges for learners. These texts often include abstracts, figures, tables, diagrams and specialized vocabulary. The ideas are complex and build across a number of paragraphs requiring focus and strategic processing. To comprehend and produce this type of text, students must be immersed in the language and thinking processes of that discipline and they must be supported by an expert guide, their teacher (Carnegie Report, 2010).

A focus at the elementary level on foundational reading, when expanded to include engaging experiences connected to informational texts, vocabulary, and writing for content-specific purposes builds background knowledge and skills in each discipline. This increases opportunities for success as students approach more rigorous content in those disciplines (Alliance for Excellent Education, 2011).

Reading, writing, speaking, listening and critical thinking must be integrated into each discipline across all grades so that all students gradually build knowledge and skills toward college and career readiness. Collaboration among institutes of higher education, CESA Statewide Network, districts, schools, teachers and family and community will guide the implementation of the Common Core State Standards in Wisconsin.



The message is that literacy is integral to attainment of content knowledge and content is essential background knowledge for literacy development.

This interdependent relationship exists in all disciplines.

The Common Core State Standards require educators to support literacy in each classroom across the state. Since the impact of this effort is significant, it is essential that resources and supports be accessible to all educators. To build consistent understanding, DPI convened a statewide Disciplinary Literacy Leadership Team in 2011 comprised of educators from many content areas and educational backgrounds. This team was charged with examining the CCSS for Disciplinary Literacy, identifying the needs in the field for support, and gathering materials and resources to address those needs. Resources are available at www.dpi.wi.gov/standards





Wisconsin Foundations for Disciplinary Literacy

To guide understanding and professional learning, a set of foundations, developed in concert with Wisconsin's Guiding Principles for Teaching and Learning, directs Wisconsin's approach to disciplinary literacy.

Academic learning begins in early childhood and develops across all disciplines.

Each discipline has its own specific vocabulary, text types, and ways of communicating. Children begin learning these context- and content-

specific differences early in life and continue through high school and beyond. While gardening, small children observe and learn the form and function of a root, stem, leaf and soil; or measure, mix and blend while baking a cake. School offers all students opportunities to develop the ability to, for example, think like a scientist, write like a historian, critique like an artist, problem-solve like an auto mechanic, or analyze technological advances like a health care technician. As literacy skills develop, educators gradually shift the responsibility for reading, writing, listening, speaking and critical thinking to students through guided supports in both individual and collaborative learning experiences.

Content knowledge is strengthened when educators integrate discipline-specific literacy into teaching and learning.

Educators help students recognize and

understand the nuances of a discipline by using strategies that "make their thinking visible." They promote classroom reading, writing, listening, speaking and critical thinking using authentic materials that support the development of content-specific knowledge. They guide students through these complex texts by using strategies that develop conceptual understanding of language and set expectations for relevant application of skills. These literacy practices deepen students' content knowledge, strategies and skills so that their learning transfers to real world situations.

The literacy skills of reading, writing, listening, speaking and critical thinking improve when content-rich learning experiences motivate and engage students.

Educators who foster disciplinary literacy develop experiences that integrate rigorous content with relevant collaborative and creative literacy processes to motivate and engage students. Setting high expectations, they structure routines and supports that empower students to take charge of their own learning. When students work in teams to research science

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Students in Wisconsin...

Demonstrate independence.

2. Build strong content and knowledge

task, purpose and discipline.

3. Respond to the varying demands of audience,

5. Value evidence.

Comprehend as well as critique.

6. Use technology and digital media

perspectives and cultures.

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strategically and capably.

7. Come to understand other

and mathematics concepts in the development of an invention or a graphic arts design; when they collaboratively build a blog that explains their recent marketing venture, they use specific literacy skills and strategies to solidify learning. Students need these opportunities over time to develop the precise and complex reading, writing, listening, speaking and critical thinking skills demanded in today's careers.

Students demonstrate their content knowledge through reading, writing, listening, and speaking as part of a contentliterate community.

Students who are literate in a particular discipline are able to successfully read, write, and speak about that discipline and can listen to and think critically as others communicate in that community. Performance tasks that allow students to present the complexity of a content area in a way that is meaningful to the field become authentic approaches to

assessing mastery within a discipline. Such tasks empower students to discover the real world connections across disciplines and to actively participate in communities of discipline-literate peers. As Wisconsin moves to the SMARTER Balanced Assessment System these performance tasks will be integral to assessment of student learning.

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What research and resources are available to support educators' use of the Common Core State Standards for Literacy in All Subjects?

The Common Core State Standards for Literacy in All Subjects reflect the importance of literacy in both the oral and written language and in both productive (speaking and writing) and receptive (listening and reading) discourse. Clearly, critical and precise thinking are required to develop all of these specific strategies and skills. The standards also address the learning and functioning of language in a technological, media-driven world because the language that we use is selective depending upon the context of the conversation.

The following section will offer relevant research and resources to support professional learning in reading, writing, speaking, listening and language across disciplines. Collegial conversation and learning, both crossdiscipline and within-discipline will help make the Common Core State Standards more applicable to schools and districts, and will address the needs of unique programs within those contexts. A collection of online resources will continue to develop as support materials emerge.

Reading Connections

While early reading focuses on learning that letters make sounds, and that words carry meaning, reading quickly develops to a point where the message taken from text depends on what the reader brings to it. The Carnegie Report, *Reading in the Disciplines* (2010) describes this phenomenon:

"The ability to comprehend written texts is not a static or fixed ability, but rather one that involves a dynamic relationship between the demands of texts and prior knowledge and goals of the reader."

Therefore, a musician reading a journal article that describes concepts in music theory will take more information away from the text than a music novice because of their knowledge and experience in music. As well, an individual who spends a significant amount of time reading automotive manuals will more easily navigate a cell phone manual because of familiarity with that type of text.

A chart excerpted from the Carnegie Report (2010) details a few of the generic and more discipline-specific strategies that support students as they attempt to comprehend complex text. While the generic strategies pertain across content areas, discipline-specific ones must be tailored to match the demands of the content area.

Both generic and discipline focused strategies and knowledge must be applied to the comprehension and evaluation of:

- Textbooks
- Journal and magazine articles
- Historically situated primary documents
- Full Length Books
- Newspaper Articles
- Book Chapters
- Multimedia and Digital Texts



Generic Reading Strategies	Discipline-Specific Reading Strategies	
Monitor comprehension	Build prior knowledge	
Pre-read	Build specialized vocabulary	
Set goals Think about what one already	Learn to deconstruct complex sentences	
knows	Use knowledge of text structures and	
Ask questions	genres to predict main and subordinat	
Make predictions Test predictions against the text Re-read Summarize	Map graphic (and mathematical) representations against explanations in the text	
	Pose discipline relevant questions	
	Compare claims and propositions across texts	
	Use norms for reasoning within the discipline (i.e. what counts as evidence) to evaluate claims	

Source: Carnegie Report, (2010)

Additional resources that support reading in specific subjects include Content Counts! Developing Disciplinary Literacy Skills, K–6 by Jennifer L. Altieri (2011). This guide for discipline-specific literacy at the elementary level offers strategies to balance the demands of literacy while continuing to make content count and help students meet the reading, writing, speaking and listening demands of the content areas as they advance in school.

A resource by Doug Buehl (2011) entitled Developing Readers in the Academic Disciplines describes what it means to read, write, and think through a disciplinary lens in the adolescent years. This teacher-friendly guide helps connect literacy with disciplinary understandings to bridge academic knowledge gaps, frontload instruction, and build critical thinking through questioning.

Note on range and content of student reading

To become college and career ready, students must grapple with works of exceptional craft and thought whose range extends across genres, cultures, and centuries. Such works offer profound insights into the human condition and serve as models for students' own thinking and writing. Along with high-quality contemporary works, these texts should be chosen from seminal U.S. documents, the classics of American literature, and the timeless dramas of Shakespeare. Through wide and deep reading of literature and literary nonfiction of steadily increasing sophistication, students gain a reservoir of literary and cultural knowledge, references, and images; the ability to evaluate intricate arguments; and the capacity to surmount the challenges posed by complex texts. (*CCSS p. 35* http://www.corestandards.org/assets/*CCSSI_ELA%20Standards.pdf*)

The Common Core State Standards require that all students "be able to comprehend texts of steadily increasing complexity as they progress through school" (Appendix A: Research Supporting Key Elements of the Standards, p. 2). More detailed definitions of complex text and examples of complex texts across disciplines are available in Appendix B of the English Language Arts CCSS at: www.dpi.wi.gov/standards.

Writing Connections

The Common Core State Standards call for emphasis on three types of writing: narrative, informational and logical argument. Writing that presents a logical argument is especially appropriate to discipline-specific work since credible evidence differs across content areas. The ability to consider multiple perspectives, assess the validity of claims and present a point of view is required in argumentative writing. These thinking and communication skills are "critical to college and career readiness" (Appendix A: p. 24).

A 2007 report entitled Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools detailed research on writing to learn, rather than only for assessment, as having a significant impact on content learning.



The study found writing to learn was equally effective for all content areas in the study (social studies, math and science) and at every grade (4-12).

Note on range and content of student writing

For students, writing is a key means of asserting and defending claims, showing what they know about a subject, and conveying what they have experienced, imagined, thought, and felt. To be college- and career-ready writers, students must take task, purpose, and audience into careful consideration, choosing words, information, structures, and formats deliberately. They need to know how to combine elements of different kinds of writing-for example, to use narrative strategies within an argument and explanation within narrative—to produce complex and nuanced writing. They need to be able to use technology strategically when creating, refining, and collaborating on writing. They have to become adept at gathering information, evaluating sources, and citing material accurately, reporting findings from their research and analysis of sources in a clear and cogent manner. They must have flexibility, concentration, and fluency to produce high quality first draft text under a tight deadline as well as the capacity to revisit and make improvements to a piece of writing over multiple drafts when circumstances encourage or require it. (CCSS p.41 http://www.corestandards.org/assets/CCSSI ELA%20Standards.pdf)

When a social studies teacher guides students in taking on the perspective of a person from a specific historical era, she might ask students to write a first person narrative from that perspective. Research into that era leads students to discover personal beliefs of that historical person. They may dig into the personal experiences, ideas, and events involved in the era to visualize life in that period. They then develop a rich understanding of the era and embed language from that era into the texts that they create. (Samples of discipline-specific writing across grades and content areas are available in Appendix C of the English Language Arts CCSS at: www.dpi. wi.gov/standards.

Speaking, Listening and Language Connections

The ability to share ideas and orally communicate with credibility in a specific academic discourse empowers students and allows access to specialized groups. In *Situated Language and Learning: A Critique of Traditional Schooling*, James Paul Gee (2004) describes the need to prioritize these skills so that students are at ease as they enter situations connected to a

specific content area and are more likely to continue their learning in that discipline.

As expertise develops, students feel more and more comfortable applying knowledge and skills while speaking and listening in a specific discipline.

- A media course may teach students appropriate expression, tone and rate of speech when addressing a large audience.
- Listening carefully to questions posed is a specialized skill that debate facilitators develop.
- Scientists learn to listen for bias in the perspectives presented by peers to determine the reliability of scientific outcomes.
- Artists have very specialized and specific ways of speaking about the many aspects of a piece.

A policy brief from the Alliance for Excellent Education called, Engineering Solutions to the National Crisis in Literacy: How to Make Good on the Promise of the Common Core State Standards describes "a staircase of literacy demands" and emphasizes the importance of a progressive development of language and literacy over time.

The conceptual understanding of "functions" in mathematics may begin to develop in elementary school in its simplest form. As the concept develops over the years, students will use the word "function" in a meaningful way when speaking and writing to describe the mathematical concept they apply. When educators explicitly connect a mathematical term to its application and repeatedly expose students to the concept connected to the term, a specialized language becomes second nature to the mathematics classroom.

Students must have extensive vocabularies, built through reading and explicit instruction embedded in the context of content learning. This enables them to comprehend complex texts, engage in purposeful writing and communicate effectively within a discipline.



Skills in determining or clarifying the meaning of words and phrases encountered, choosing flexibly from an array of strategies, and seeing an individual word as part of a network of other words that, for example, have similar denotations but different connotations allow students to access information and support their own learning.

Literacy in Multiple Languages

Increasing economic, security, cross-cultural and global demands underscore the value of literacy in more than one language. Students who think, read, write, and communicate in multiple languages are an asset to our own country and can more easily interact and compete in the world at large.

English language learners (ELL) in our classrooms face significant challenges as they add a new language and work to grasp content at the same rate as their English-speaking peers. In a report to the Carnegie Corporation entitled Double the Work: Challenges and Solutions to Acquiring Academic Literacy for Adolescent English Language Learners (2007) researchers found that a focus on academic literacy is crucial for ELL's success in school. In their description of academic literacy they include reading, writing and oral discourse that:

- Varies from subject to subject.
- Requires knowledge of multiple genres of text, purposes for text use and text media.
- Is influenced by students' literacies in context outside of school.
- Is influenced by students' personal, social, and cultural experiences.

The needs of our English language learners are addressed when we embed disciplinary literacy strategies into our subject area teaching. These high impact strategies and skills allow English language learners and all students to more readily access content knowledge and connect it to the prior knowledge they bring to the classroom. When educators take the initiative to understand and embed these strategies and skills, they offer additional opportunities for success to all of our students.

Who Should Use the Common Core State Standards for Literacy in All Subjects?

The term "disciplinary literacy" may be new to many Wisconsin teachers. The Common Core State Standards for Literacy in All Subjects as excerpted from the Common Core Standards for English Language Arts, are intended for all K-12 educators. Each standard is written broadly in content-neutral language, breaking down the complex skills that comprise reading, writing, speaking, listening, and language. These standards serve as a complement to the specific content-related standards of each individual discipline. Administrators and communities may also find the disciplinary literacy standards helpful in charting a clear and consistent school or district-wide approach to literacy that moves Wisconsin forward toward the goal of every student career and college ready.



References:

 Alteri, Jennifer (2011). Content Counts! Developing Disciplinary Literacy Skills, K–6. International Reading Association. ISBN 13: 978-0-87207-838-3

 Buehl, Doug. (2011). Developing Readers in the Academic Disciplines. International Reading Association. ISBN 13: 978-0-87207-845-1

 Carnevale, A. (2010) Center on Education and the Workforce Forecasts of Education Demand to 2018

 College and Career Readiness Standards; http://www.nc4ea.org/files/appropriate_college-readiness_standards_for_all_students-05-03-06.pdf

 Common Core Standards for English Language Arts; www.corestandards.org

 Washington, DC: Georgetown Center on Education and the Workforce, 2010, available at: http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/CEW_press_conference_ppt.pdf (accessed June 7, 2011)

 Double the work: Challenges and Solutions to Acquiring Academic Literacy for Adolescent English Language Learners. Carnegie Corporation. New York: 2007.

 Engineering Solutions to the National Crisis in Literacy: How to Make Good on the Promise of the Common Core State Standards.Alliance for Excellent Education.Washington DC. 2011

 Gee. James Paul (2004) Situated Language and Learning: A Critique of Traditional Schooling

 Reading in the Disciplines: The Challenges of Adolescent Literacy. Carnegie Corporation. New York: 2010

 State Superintendent's Adolescent Literacy Plan (2008) Wisconsin Department of Public Instruction, Madison,WI

 Vygotsky, (1978) Mind in Society: The Development of Higher Psychological Processes Harvard University Press; 14th edition

 Writing Next: Effective Strategies to Improve Writing of Adolescents in Mi



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Key Design Considerations

CCR and grade-specific standards

The CCR standards anchor the document and define general, cross-disciplinary literacy expectations that must be met for students to be prepared to enter college and workforce training programs ready to succeed. The K-12 grade-specific standards define end-of-year expectations and a cumulative progression designed to enable students to meet college and career readiness expectations no later than the end of high school. The CCR and high school (grades 9–12) standards work in tandem to define the college and career readiness line—the former providing broad standards, the latter providing additional specificity. Hence, both should be considered when developing college and career readiness assessments.

Students advancing through the grades are expected to meet each year's gradespecific standards, retain or further develop skills and understandings mastered in preceding grades, and work steadily toward meeting the more general expectations described by the CCR standards.

Grade levels for K-8; grade bands for 9-10 and 11-12

The Standards use individual grade levels in kindergarten through grade 8 to provide useful specificity; the Standards use two-year bands in grades 9–12 to allow schools, districts, and states flexibility in high school course design.

A focus on results rather than means

By emphasizing required achievements, the Standards leave room for teachers, curriculum developers, and states to determine how those goals should be reached and what additional topics should be addressed. Thus, the Standards do not mandate such things as a particular writing process or the full range of metacognitive strategies that students may need to monitor and direct their thinking and learning. Teachers are thus free to provide students with whatever tools and knowledge their professional judgment and experience identify as most helpful for meeting the goals set out in the Standards.

An integrated model of literacy

Although the Standards are divided into Reading, Writing, Speaking and Listening, and Language strands for conceptual clarity, the processes of communication are closely connected, as reflected throughout this document. For example, Writing standard 9 requires that students be able to write about what they read. Likewise, Speaking and Listening standard 4 sets the expectation that students will share findings from their research.

Research and media skills blended into the Standards as a whole

To be ready for college, workforce training, and life in a technological society, students need the ability to gather, comprehend, evaluate, synthesize, and report on information and ideas, to conduct original research in order to answer questions or solve problems, and to analyze and create a high volume and extensive range of print and nonprint texts in media forms old and new. The need to conduct research and to produce and consume media is embedded into every aspect of today's curriculum. In like fashion, research and media skills and understandings are embedded throughout the Standards rather than treated in a separate section.

Shared responsibility for students' literacy development

The Standards insist that instruction in reading, writing, speaking, listening, and language be a shared responsibility within the school. The K-5 standards include expectations for reading, writing, speaking, listening, and language applicable to a range of subjects, including but not limited to ELA. The grades 6-12 standards are divided into two sections, one for ELA and the other for history/social studies, science, and technical subjects. This division reflects the unique, time-honored place of ELA teachers in developing students' literacy skills while at the same time recognizing that teachers in other areas must have a role in this development as well.

Part of the motivation behind the interdisciplinary approach to literacy promulgated by the Standards is extensive research establishing the need for college and career ready students to be proficient in reading complex informational text independently in a variety of content areas. Most of the required reading in college and workforce training programs is informational in structure and challenging in content; postsecondary education programs typically provide students with both a higher volume of such reading than is generally required in K-12 schools and comparatively little scaffolding.

The Standards are not alone in calling for a special emphasis on informational text. The 2009 reading framework of the National Assessment of Educational Progress (NAEP) requires a high and increasing proportion of informational text on its assessment as students advance through the grades.



Distribution of Literary and Informational Passages by Grade in the 2009 NAEP Reading Framework

Grade	Literary	Informational
4	50%	50%
8	45%	55%
12	30%	70%

Source: National Assessment Governing Board. (2008). *Reading framework for the 2009 National Assessment of Educational Progress.* Washington, DC: U.S. Government Printing Office.

The Standards aim to align instruction with this framework so that many more students than at present can meet the requirements of college and career readiness. In K-5, the Standards follow NAEP's lead in balancing the reading of literature with the reading of informational texts, including texts in history/ social studies, science, and technical subjects. In accord with NAEP's growing emphasis on informational texts in the higher grades, the Standards demand that a significant amount of reading of informational texts take place in and outside the ELA classroom. Fulfilling the Standards for 6-12 ELA requires much greater attention to a specific category of informational text-literary nonfiction-than has been traditional. Because the ELA classroom must focus on literature (stories, drama, and poetry) as well as literary nonfiction, a great deal of informational reading in grades 6-12 must take place in other classes if the NAEP assessment framework is to be matched instructionally.¹ To measure students' growth toward college and career readiness, assessments aligned with the Standards should adhere to the distribution of texts across grades cited in the NAFP framework.

NAEP likewise outlines a distribution across the grades of the core purposes and types of student writing. The 2011 NAEP framework, like the Standards, cultivates the development of three mutually reinforcing writing capacities: writing to persuade, to explain, and to convey real or imagined experience. Evidence concerning the demands of college and career readiness gathered during development of the Standards concurs with NAEP's shifting emphases: standards for grades 9-12 describe writing in all three forms, but, consistent with NAEP, the overwhelming focus of writing throughout high school should be on arguments and informative/explanatory texts.²

Distribution of Communicative Purposes by Grade in the 2011 NAEP Writing Framework

Grade	To Persuade	To Explain	To Convey Experience
4	30%	35%	35%
8	35%	35%	30%
12	40%	40%	20%

Source: National Assessment Governing Board. (2007). Writing framework for the 2011 National Assessment of Educational Progress, pre-publication edition. Iowa City, IA: ACT, Inc.

It follows that writing assessments aligned with the Standards should adhere to the distribution of writing purposes across grades outlined by NAEP.

Focus and coherence in instruction and assessment

While the Standards delineate specific expectations in reading, writing, speaking, listening, and language, each standard need not be a separate focus for instruction and assessment. Often, several standards can be addressed by a single rich task. For example, when editing writing, students address Writing standard 5 ("Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach") as well as Language standards 1-3 (which deal with conventions of standard English and knowledge of language). When drawing evidence from literary and informational texts per Writing standard 9, students are also demonstrating their comprehension skill in relation to specific standards in Reading. When discussing something they have read or written, students are also demonstrating their speaking and listening skills. The CCR anchor standards themselves provide another source of focus and coherence.

The same ten CCR anchor standards for Reading apply to both literary and informational texts, including texts in history/social studies, science, and technical subjects. The ten CCR anchor standards for Writing cover numerous text types and subject areas. This means that students can develop mutually reinforcing skills and exhibit mastery of standards for reading and writing across a range of texts and classrooms.

¹The percentages on the table reflect the sum of student reading, not just reading in ELA settings. Teachers of senior English classes, for example, are not required to devote 70 percent of reading to informational texts. Rather, 70 percent of student reading across the grade should be informational.

 $^{^2\!}As$ with reading, the percentages in the table reflect the sum of student writing, not just writing in ELA settings.



What is Not Covered by the Standards

The Standards should be recognized for what they are not as well as what they are. The most important intentional design limitations are as follows:

- The Standards define what all students are expected to know and be able to do, not how teachers should teach. For instance, the use of play with young children is not specified by the Standards, but it is welcome as a valuable activity in its own right and as a way to help students meet the expectations in this document. Furthermore, while the Standards make references to some particular forms of content, including mythology, foundational U.S. documents, and Shakespeare, they do not—indeed, cannot—enumerate all or even most of the content that students should learn. The Standards must therefore be complemented by a well-developed, content-rich curriculum consistent with the expectations laid out in this document.
- 2. While the Standards focus on what is most essential, they do not describe all that can or should be taught. A great deal is left to the discretion of teachers and curriculum developers. The aim of the Standards is to articulate the fundamentals, not to set out an exhaustive list or a set of restrictions that limits what can be taught beyond what is specified herein.
- 3. The Standards do not define the nature of advanced work for students who meet the Standards prior to the end of high school. For those students, advanced work in such areas as literature, composition, language, and journalism should be available. This work should provide the next logical step up from the college and career readiness baseline established here.
- 4. The Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. No set of grade-specific standards can fully reflect the great variety in abilities, needs, learning rates, and achievement levels of students in any given classroom. However, the Standards do provide clear signposts along the way to the goal of college and career readiness for all students.

5. It is also beyond the scope of the Standards to define the full range of supports appropriate for English language learners and for students with special needs. At the same time, all students must have the opportunity to learn and meet the same high standards if they are to access the knowledge and skills necessary in their post-high school lives.

Each grade will include students who are still acquiring English. For those students, it is possible to meet the standards in reading, writing, speaking, and listening without displaying native-like control of conventions and vocabulary.

The Standards should also be read as allowing for the widest possible range of students to participate fully from the outset and as permitting appropriate accommodations to ensure maximum participation of students with special education needs. For example, for students with disabilities *reading* should allow for the use of Braille, screen-reader technology, or other assistive devices, while *writing* should include the use of a scribe, computer, or speech-to-text technology. In a similar vein, *speaking* and *listening* should be interpreted broadly to include sign language.

6. While the ELA and content area literacy components described herein are critical to college and career readiness, they do not define the whole of such readiness. Students require a wideranging, rigorous academic preparation and, particularly in the early grades, attention to such matters as social, emotional, and physical development and approaches to learning. Similarly, the Standards define literacy expectations in history/social studies, science, and technical subjects, but literacy standards in other areas, such as mathematics and health education, modeled on those in this document are strongly encouraged to facilitate a comprehensive, schoolwide literacy program.



Students Who are College and Career Ready in Reading, Writing, Speaking, Listening, and Language

The descriptions that follow are not standards themselves but instead offer a portrait of students who meet the standards set out in this document. As students advance through the grades and master the standards in reading, writing, speaking, listening, and language, they are able to exhibit with increasing fullness and regularity these capacities of the literate individual.

They demonstrate independence.

Students can, without significant scaffolding, comprehend and evaluate complex texts across a range of types and disciplines, and they can construct effective arguments and convey intricate or multifaceted information. Likewise, students are able independently to discern a speaker's key points, request clarification, and ask relevant questions. They build on others' ideas, articulate their own ideas, and confirm they have been understood. Without prompting, they demonstrate command of standard English and acquire and use a wide-ranging vocabulary. More broadly, they become self-directed learners, effectively seeking out and using resources to assist them, including teachers, peers, and print and digital reference materials.

They build strong content knowledge.

Students establish a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They become proficient in new areas through research and study. They read purposefully and listen attentively to gain both general knowledge and discipline-specific expertise. They refine and share their knowledge through writing and speaking.

They respond to the varying demands of audience, task, purpose, and discipline.

Students adapt their communication in relation to audience, task, purpose, and discipline. They set and adjust purpose for reading, writing, speaking, listening, and language use as warranted by the task. They appreciate nuances, such as how the composition of an audience should affect tone when speaking and how the connotations of words affect meaning. They also know that different disciplines call for different types of evidence (e.g., documentary evidence in history, experimental evidence in science).

They comprehend as well as critique.

Students are engaged and open-minded—but discerning—readers and listeners. They work diligently to understand precisely what an author or speaker is saying, but they also question an author's or speaker's assumptions and premises and assess the veracity of claims and the soundness of reasoning.

They value evidence.

Students cite specific evidence when offering an oral or written interpretation of a text. They use relevant evidence when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener, and they constructively evaluate others' use of evidence.

They use technology and digital media strategically and capably.

Students employ technology thoughtfully to enhance their reading, writing, speaking, listening, and language use. They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using technology with what they learn offline. They are familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals.

They come to understand other perspectives and cultures.

Students appreciate that the twenty-first-century classroom and workplace are settings in which people from often widely divergent cultures and who represent diverse experiences and perspectives must learn and work together. Students actively seek to understand other perspectives and cultures through reading and listening, and they are able to communicate effectively with people of varied backgrounds. They evaluate other points of view critically and constructively. Through reading great classic and contemporary works of literature representative of a variety of periods, cultures, and worldviews, students can vicariously inhabit worlds and have experiences much different than their own.



How to Read This Document

Overall Document Organization

The Standards comprise three main sections: a comprehensive K-5 section and two content area-specific sections for grades 6-12, one for ELA and one for history/social studies, science, and technical subjects. Three appendices accompany the main document.

Each section is divided into strands. K-5 and 6-12 ELA have Reading, Writing, Speaking and Listening, and Language strands; the 6-12 history/ social studies, science, and technical subjects section focuses on Reading and Writing. Each strand is headed by a strand-specific set of College and Career Readiness Anchor Standards that is identical across all grades and content areas.

Standards for each grade within K-8 and for grades 9-10 and 11-12 follow the CCR anchor standards in each strand. Each grade-specific standard (as these standards are collectively referred to) corresponds to the same-numbered CCR anchor standard. Put another way, each CCR anchor standard has an accompanying grade-specific standard translating the broader CCR statement into grade-appropriate end-of-year expectations.

Individual CCR anchor standards can be identified by their strand, CCR status, and number (R.CCR.6, for example). Individual grade-specific standards can be identified by their strand, grade, and number (or number and letter, where applicable), so that RI.4.3, for example, stands for Reading, Informational Text, grade 4, standard 3 and W.5.1a stands for Writing, grade 5, standard 1a. Strand designations can be found in brackets alongside the full strand title.

Who is responsible for which portion of the Standards

A single K-5 section lists standards for reading, writing, speaking, listening, and language across the curriculum, reflecting the fact that most or all of the instruction students in these grades receive comes from one teacher. Grades 6-12 are covered in two content area-specific sections, the first for the English language arts teacher and the second for teachers of history/social studies, science, and technical subjects. Each section uses the same CCR anchor standards but also includes grade-specific standards tuned to the literacy requirements of the particular discipline(s).

Key Features of the Standards

Reading: Text complexity and the growth of comprehension

The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by-grade "staircase" of increasing text complexity that rises from beginning reading

to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts.

Writing: Text types, responding to reading, and research

The Standards acknowledge the fact that whereas some writing skills, such as the ability to plan, revise, edit, and publish, are applicable to many types of writing, other skills are more properly defined in terms of specific writing types: arguments, informative/explanatory texts, and narratives. Standard 9 stresses the importance of the writing-reading connection by requiring students to draw upon and write about evidence from literary and informational texts. Because of the centrality of writing to most forms of inquiry, research standards are prominently included in this strand, though skills important to research are infused throughout the document.

Speaking and Listening: Flexible communication and collaboration

Including but not limited to skills necessary for formal presentations, the Speaking and Listening standards require students to develop a range of broadly useful oral communication and interpersonal skills. Students must learn to work together, express and listen carefully to ideas, integrate information from oral, visual, quantitative, and media sources, evaluate what they hear, use media and visual displays strategically to help achieve communicative purposes, and adapt speech to context and task.

Language: Conventions, effective use, and vocabulary

The Language standards include the essential "rules" of standard written and spoken English, but they also approach language as a matter of craft and informed choice among alternatives. The vocabulary standards focus on understanding words and phrases, their relationships, and their nuances and on acquiring new vocabulary, particularly general academic and domain-specific words and phrases.





Literacy in All Subjects

K-5



College and Career Readiness Anchor Standards for Reading

The K-5 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

- 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- 2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
- 3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

- 4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
- 5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
- 6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

- 7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.*
- 8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- 9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

*Please see "Research to Build and Present Knowledge" in Writing and "Comprehension and Collaboration" in Speaking and Listening for additional standards relevant to gathering, assessing, and applying information from print and digital sources.

Note on range and content of student reading

To build a foundation for college and career readiness, students must read widely and deeply from among a broad range of high-quality, increasingly challenging literary and informational texts. Through extensive reading of stories, dramas, poems, and myths from diverse cultures and different time periods, students gain literary and cultural knowledge as well as familiarity with various text structures and elements. By reading texts in history/social studies, science, and other disciplines, students build a foundation of knowledge in these fields that will also give them the background to be better readers in all content areas. Students can only gain this foundation when the curriculum is intentionally and coherently structured to develop rich content knowledge within and across grades. Students also acquire the habits of reading independently and closely, which are essential to their future success



Reading Standards for Informational Text K-5

	Kindergartners:		Grade 1 students:	Grade 2 students:					
Ke	/ Ideas and Details								
1.	With prompting and support, ask and answer questions about key details in a text.	1.	Ask and answer questions about key details in a text.	1.	Ask and answer such questions as <i>who, what, where, when, why,</i> and <i>how</i> to demonstrate understanding of key details in a text.				
2.	With prompting and support, identify the main topic and retell key details of a text.	2.	Identify the main topic and retell key details of a text.	2.	Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.				
3.	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	3.	Describe the connection between two individuals, events, ideas, or pieces of information in a text.	3.	Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.				
Cra	ft and Structure								
4.	With prompting and support, ask and answer questions about unknown words in a text.	4.	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.	4.	Determine the meaning of words and phrases in a text relevant to a <i>grade 2 topic or subject area</i> .				
5.	Identify the front cover, back cover, and title page of a book.	5.	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.	5.	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.				
6.	Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.	6.	Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.	6.	Identify the main purpose of a text, including what the author wants to answer, explain, or describe.				
Int	egration of Knowledge and Ideas								
7.	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	7.	Use the illustrations and details in a text to describe its key ideas.	7.	Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.				
8.	With prompting and support, identify the reasons an author gives to support points in a text.	8.	Identify the reasons an author gives to support points in a text.	8.	Describe how reasons support specific points the author makes in a text.				
9.	With prompting and support, identify basic	9.	Identify basic similarities in and differences	9.	Compare and contrast the most important points				

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	information in a text.		provided by the words in a text.		describe.
Inte	egration of Knowledge and Ideas				
7.	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	7.	Use the illustrations and details in a text to describe its key ideas.	7.	Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
8.	With prompting and support, identify the reasons an author gives to support points in a text.	8.	Identify the reasons an author gives to support points in a text.	8.	Describe how reasons support specific points the author makes in a text.
9.	With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	9.	Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	9.	Compare and contrast the most important points presented by two texts on the same topic.
Rar	nge of Reading and Level of Text Complexit	t y			
10.	Actively engage in group reading activities with purpose and understanding.	10.	With prompting and support, read informational texts appropriately complex for grade 1.	10.	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.



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Reading Standards for Informational Text K-5

	Grade 3 students:		Grade 4 students:		Grade 5 students:
Key	/ Ideas and Details				
1.	Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	1.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	1.	Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
2.	Determine the main idea of a text; recount the key details and explain how they support the main idea.	2.	Determine the main idea of a text and explain how it is supported by key details; summarize the text.	2.	Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
3.	Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.	3.	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	3.	Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
Cra	ft and Structure				
4.	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 3 topic or subject area</i> .	4.	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a <i>grade 4 topic or subject area</i> .	4.	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 5 topic or subject area</i> .
5.	Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.	5.	Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.	5.	Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
6.	Distinguish their own point of view from that of the author of a text.	6.	Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.	6.	Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
Inte	egration of Knowledge and Ideas				
7.	Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).	7.	Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	7.	Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
8.	Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).	8.	Explain how an author uses reasons and evidence to support particular points in a text.	8.	Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
9.	Compare and contrast the most important points and key details presented in two texts on the same topic.	9.	Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	9.	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
Rar	nge of Reading and Level of Text Complexit	у			
10.	By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2-3 text complexity band independently and proficiently.	10.	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	10.	By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.



College and Career Readiness Anchor Standards for Writing

The K-5 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Text Types and Purposes*

- 1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- 2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- 3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Production and Distribution of Writing

- 4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- 6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

- 7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
- 8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- 9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Note on range and content of student writing

To build a foundation for college and career readiness, students need to learn to use writing as a way of offering and supporting opinions, demonstrating understanding of the subjects they are studying, and conveving real and imagined experiences and events. They learn to appreciate that a key purpose of writing is to communicate clearly to an external, sometimes unfamiliar audience, and they begin to adapt the form and content of their writing to accomplish a particular task and purpose. They develop the capacity to build knowledge on a subject through research projects and to respond analytically to literary and informational sources. To meet these goals, students must devote significant time and effort to writing, producing numerous pieces over short and extended time frames throughout the vear.

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*These broad types of writing include many subgenres.

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Writing Standards K-5

The following standards for K-5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.*

	Kindergartners:		Grade 1 students:		Grade 2 students:
Тех	t Types and Purposes				
1.	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., <i>My favorite book is</i>).	1.	Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	1.	Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion use linking words (e.g., <i>because, and, also</i>) to connect opinion and reasons, and provide a concluding statement or section.
2.	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	2.	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.	2.	Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
3.	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.	3.	Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	3.	Write narratives in which they recount a well- elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.
Pro	duction and Distribution of Writing				
4.	(Begins in grade 3)	4.	(Begins in grade 3)	4.	(Begins in grade 3)
5.	With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.	5.	With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.	5.	With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
6.	With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.	6.	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.	6.	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
Re	search to Build and Present Knowledge				
7.	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).	7.	Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).	7.	Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
8.	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	8.	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	8.	Recall information from experiences or gather information from provided sources to answer a question.
9.	(Begins in grade 4)	9.	(Begins in grade 4)	9.	(Begins in grade 4)
Rai	nge of Writing				
10.	(Begins in grade 3)	10.	(Begins in grade 3)	10.	(Begins in grade 3)



K-5 | WRITING

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Writing Standards K-5

	Grade 3 students:		Grade 4 students:		Grade 5 students:
Тех	kt Types and Purposes				
1.	 Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., <i>because</i>, <i>therefore</i>, <i>since</i>, <i>for example</i>) to connect opinion and reasons. d. Provide a concluding statement or section. 	1.	 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition). d. Provide a concluding statement or section related to the opinion presented. 	1.	 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases and clauses (e.g., <i>consequently, specifically</i>). d. Provide a concluding statement or section related to the opinion presented.
2.	 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., <i>also</i>, <i>another</i>, <i>and</i>, <i>more</i>, <i>but</i>) to connect ideas within categories of information. d. Provide a concluding statement or section. 	2.	 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented. 	2.	 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., <i>in contrast, especially</i>). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.
3.	 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure. 	3.	 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situationand introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events. 	3.	 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.



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K-5 | WRITING

Writing Standards K-5

	Grade 3 students:		Grade 4 students:		Grade 5 students:
Pro	duction and Distribution of Writing				
4.	With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1-3 above.)	4.	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	4.	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
5.	With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 3 on pages 28 and 29.)	5.	With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 4 on pages 28 and 29.)	5.	With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 5 on pages 28 and 29.)
6.	With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.	6.	With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.	6.	With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.
Res	earch to Build and Present Knowledge				
7.	Conduct short research projects that build knowledge about a topic.	7.	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	7.	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
8.	Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	8.	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	8.	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
9.	(Begins in grade 4)	9.	 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 4 Reading standards to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions]."). b. Apply grade 4 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text"). 	9.	 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). b. Apply grade 5 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").
Ran	ge of Writing				
10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.



College and Career Readiness Anchor Standards for Speaking and Listening

The K-5 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Comprehension and Collaboration

- 1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- 2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- 3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

- 4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
- 5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- 6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Note on range and content of student speaking and listening

To build a foundation for college and career readiness, students must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner. Being productive members of these conversations requires that students contribute accurate, relevant information; respond to and develop what others have said; make comparisons and contrasts; and analyze and synthesize a multitude of ideas in various domains.

New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. Digital texts confront students with the potential for continually updated content and dynamically changing combinations of words, graphics, images, hyperlinks, and embedded video and audio.



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Speaking and Listening Standards K-5

The following standards for K-5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

	Kindergartners:		Grade 1 students:		Grade 2 students:
Со	mprehension and Collaboration				
1.	 Participate in collaborative conversations with diverse partners about <i>kindergarten topics and texts</i> with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges. 	1.	 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. c. Ask questions to clear up any confusion about the topics and texts under discussion. 	1.	 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.
2.	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	2.	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.	2.	Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
3.	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	3.	Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.	3.	Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
Pre	esentation of Knowledge and Ideas				
4.	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	4.	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	4.	Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.
5.	Add drawings or other visual displays to descriptions as desired to provide additional detail.	5.	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.	5.	Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
6.	Speak audibly and express thoughts, feelings, and ideas clearly.	6.	Produce complete sentences when appropriate to task and situation.	6.	Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

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Speaking and Listening Standards K-5

	Grade 3 students:		Grade 4 students:		Grade 5 students:
Со	mprehension and Collaboration				
1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on <i>grade 3 topics and texts</i> , building on others' ideas and expressing their own clearly.	1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on <i>grade 4 topics and texts</i> , building on others' ideas and expressing their own clearly.	1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on <i>grade 5 topics and texts</i> , building on others' ideas and expressing their own clearly.
	a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.		a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.		a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
	Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about		b. Follow agreed-upon rules for discussions and carry out assigned roles.c. Pose and respond to specific guestions to		b. Follow agreed-upon rules for discussions and carry out assigned roles.c. Pose and respond to specific questions by
	the topics and texts under discussion).c. Ask questions to check understanding of information presented, stay on topic, and link		clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.		making comments that contribute to the discussion and elaborate on the remarks of others.
	their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.		 Review the key ideas expressed and explain their own ideas and understanding in light of the discussion. 		 Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
2.	Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	2.	Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	2.	Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
3.	Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.	3.	Identify the reasons and evidence a speaker provides to support particular points.	3.	Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.
Pre	esentation of Knowledge and Ideas				
4.	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	4.	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	4.	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
5.	Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.	5.	Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.	5.	Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
6.	Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.	6.	Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.	6.	Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.



College and Career Readiness Anchor Standards for Language

The K-5 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Conventions of Standard English

- 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use

- 4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
- 5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- 6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

Note on range and content of student language use

To build a foundation for college and career readiness in language, students must gain control over many conventions of standard English grammar, usage, and mechanics as well as learn other ways to use language to convey meaning effectively. They must also be able to determine or clarify the meaning of grade-appropriate words encountered through listening, reading, and media use; come to appreciate that words have nonliteral meanings, shadings of meaning, and relationships to other words; and expand their vocabulary in the course of studying content. The inclusion of Language standards in their own strand should not be taken as an indication that skills related to conventions, effective language use, and vocabulary are unimportant to reading, writing, speaking, and *listening; indeed, they are inseparable* from such contexts.



Language Standards K-5

The following standards for grades K-5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* Beginning in grade 3, skills and understandings that are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking are marked with an asterisk (*).

	Kindergartners:	Grade 1 students:	Grade 2 students:
20	onventions of Standard English		
Ι.	 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print many upper- and lowercase letters. b. Use frequently occurring nouns and verbs. c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., <i>dog, dogs; wish, wishes</i>). d. Understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>). e. Use the most frequently occurring prepositions (e.g., <i>to, from, in, out, on, off, for, of, by, with</i>). f. Produce and expand complete sentences in shared language activities. 	 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print all upper- and lowercase letters. b. Use common, proper, and possessive nouns. c. Use singular and plural nouns with matching verbs in basic sentences (e.g., <i>He hops; We hop</i>). d. Use personal, possessive, and indefinite pronouns (e.g., <i>I, me, my; they, them, their; anyone, everything</i>). e. Use verbs to convey a sense of past, present, and future (e.g., <i>Yesterday I walked home; Today I walk home; Tomorrow I will walk home</i>). f. Use frequently occurring adjectives. g. Use frequently occurring conjunctions (e.g., <i>and, but, or, so, because</i>). h. Use determiners (e.g., articles, demonstratives). i. Use frequently occurring prepositions (e.g., <i>during, beyond, toward</i>). j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts. 	 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. Use collective nouns (e.g., group). Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish). Use reflexive pronouns (e.g., myself, ourselves) Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told). Use adjectives and adverbs, and choose between them depending on what is to be modified. Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy).
2.	 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize the first word in a sentence and the pronoun <i>I</i>. b. Recognize and name end punctuation. c. Write a letter or letters for most consonant and short-vowel sounds (phonemes). d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships. 	 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize dates and names of people. b. Use end punctuation for sentences. c. Use commas in dates and to separate single words in a series. d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words. e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions. 	 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize holidays, product names, and geographic names. b. Use commas in greetings and closings of letters. c. Use an apostrophe to form contractions and frequently occurring possessives. d. Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil) e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.



L

Language Standards K-5

	Kindergartners:		Grade 1 students:		Grade 2 students:
٢n	owledge of Language				
3.	(Begins in grade 2)	3.	(Begins in grade 2)	3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Compare formal and informal uses of English.
Vo	cabulary Acquisition and Use				
1.	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>kindergarten reading and content</i>. a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb <i>to duck</i>). b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed</i>, <i>-s</i>, <i>re-</i>, <i>un-</i>, <i>pre-</i>, <i>-ful</i>, <i>-less</i>) as a clue to the meaning of an unknown word. 	4.	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Use frequently occurring affixes as a clue to the meaning of a word. c. Identify frequently occurring root words (e.g., <i>look</i>) and their inflectional forms (e.g., <i>looks</i>, <i>looked</i>, <i>looking</i>). 	4.	 Determine or clarify the meaning of unknown an multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell) c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional). d. Use knowledge of the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark). e. Use glossaries and beginning dictionaries, bo print and digital, to determine or clarify the meaning of words and phrases.
5.	 With guidance and support from adults, explore word relationships and nuances in word meanings. a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). c. Identify real-life connections between words and their use (e.g., note places at school that are <i>colorful</i>). d. Distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk, march, strut, prance</i>) by acting out the meanings. 	5.	 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. b. Define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes). c. Identify real-life connections between words and their use (e.g., note places at home that are <i>cozy</i>). d. Distinguish shades of meaning among verbs differing in manner (e.g., <i>look, peek, glance, stare, glare, scowl</i>) and adjectives differing in intensity (e.g., <i>large, gigantic</i>) by defining or choosing them or by acting out the meanings. 	5.	 Demonstrate understanding of word relationships and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., describe foods that are <i>spicy</i> or <i>juicy</i>). b. Distinguish shades of meaning among closely related verbs (e.g., <i>toss, throw, hurl</i>) and close related adjectives (e.g., <i>thin, slender, skinny, scrawny</i>).
6.	Use words and phrases acquired through conversations, reading and being read to, and responding to texts.	6.	Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., <i>because</i>).	6.	Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., <i>When other kids a</i> happy that makes me happy).



K-5 | LANGUAGE

L

Language Standards K-5

	Grade 3 students:		Grade 4 students:		Grade 5 students:
Kn	owledge of Language				
3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.a. Choose words and phrases for effect.*b. Recognize and observe differences between the conventions of spoken and written standard English.	3.	 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases to convey ideas precisely.* b. Choose punctuation for effect.* c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion). 	3.	 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style. b. Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, drama or poems.
Vo	cabulary Acquisition and Use				
4.	 Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases. 	4.	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases. 	4.	 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
5.	 Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., <i>take steps</i>). b. Identify real-life connections between words and their use (e.g., describe people who are <i>friendly</i> or <i>helpful</i>). c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., <i>knew, believed, suspected, heard, wondered</i>). 	5.	 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., <i>as pretty as a picture</i>) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms). 	5.	 Demonstrate understanding of figurative language word relationships, and nuances in word meanings a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of commo idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.
6.	Acquire and use accurately grade-appropriate conversational, general academic, and domain- specific words and phrases, including those that signal spatial and temporal relationships (e.g., <i>After dinner that night we went looking for them</i>).	6.	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., <i>quizzed</i> , <i>whined</i> , <i>stammered</i>) and that are basic to a particular topic (e.g., <i>wildlife</i> , <i>conservation</i> , and	6.	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover, in addition).



Language Progressive Skills, by Grade

The following skills, marked with an asterisk (*) in Language standards 1-3, are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking.

Chan david	Grade(s)												
Standard	3	4	5	6	7	8	9-10	11-12					
L.3.1f. Ensure subject-verb and pronoun-antecedent agreement.													
L.3.3a. Choose words and phrases for effect.													
L.4.1f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.													
L.4.1g. Correctly use frequently confused words (e.g., to/too/two; there/their).													
L.4.3a. Choose words and phrases to convey ideas precisely.													
L.4.3b. Choose punctuation for effect.													
L.5.1d. Recognize and correct inappropriate shifts in verb tense.													
L.5.2a. Use punctuation to separate items in a series. ⁺													
L.6.1c. Recognize and correct inappropriate shifts in pronoun number and person.													
L.6.1d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).													
L.6.1e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.													
L.6.2a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.													
L.6.3a. Vary sentence patterns for meaning, reader/listener interest, and style. [±]													
L.6.3b. Maintain consistency in style and tone.													
L.7.1c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.													
L.7.3a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.													
L.8.1d. Recognize and correct inappropriate shifts in verb voice and mood.													
L.9-10.1a. Use parallel structure.													

*Subsumed by L.7.3a *Subsumed by L.9-10.1a *Subsumed by L.11-12.3a



Standard 10: Range, Quality, and Complexity of Student Reading K-5

Measuring Text Complexity: Three Factors



Qualitative evaluation of the text:	Levels of meaning, structure, language conventionality and knowledge demands
Quantitative evaluation of the text	Readability measures and other scores of text complexity
Matching reader to text and task:	Reader variables (such as motivation, knowledge, and experiences) and task variables (such as purpose and the complexity generated by the task assigned and the ques- tions posed)

Range of Text Types for K-5

Students in K-5 apply the Reading standards to the following range of text types, with texts selected from a broad range of cultures and periods.

	Literature	Informational Text				
Stories	Dramas	Poetry	Literary Nonfiction and Historical, Scientific, and Technical Texts			
Includes children's adventure stories, folktales, legends, fables, fantasy, realistic fiction, and myth	Includes staged dialogue and brief familiar scenes	Includes nursery rhymes and the subgenres of the narrative poem, limerick, and free verse poem	Includes biographies and autobiographies; books about history, social studies, science, and the arts; technical texts, including directions, forms, and information displayed in graphs, charts, or maps; and digital sources on a range of topics			



Texts Illustrating the Complexity, Quality, and Range of Student Reading K-5

exte	s Illustrating the Complexity, Quality, and Range o
	Informational Texts: Literary Nonfiction and Historical, Scientific, and Technical Texts
К*	 My Five Senses by Aliki (1962)** Truck by Donald Crews (1980) I Read Signs by Tana Hoban (1987) What Do You Do With a Tail Like This? by Steve Jenkins and Robin Page (2003)* Amazing Whales! by Sarah L. Thomson (2005)*
1*	 A Tree Is a Plant by Clyde Robert Bulla, illustrated by Stacey Schuett (1960)** Starfish by Edith Thacher Hurd (1962) Follow the Water from Brook to Ocean by Arthur Dorros (1991)** From Seed to Pumpkin by Wendy Pfeffer, illustrated by James Graham Hale (2004)* How People Learned to Fly by Fran Hodgkins and True Kelley (2007)*
2-3	 A Medieval Feast by Aliki (1983) From Seed to Plant by Gail Gibbons (1991) The Story of Ruby Bridges by Robert Coles (1995)* A Drop of Water: A Book of Science and Wonder by Walter Wick (1997) Moonshot: The Flight of Apollo 11 by Brian Floca (2009)
4-5	 Discovering Mars: The Amazing Story of the Red Planet by Melvin Berger (1992) Hurricanes: Earth's Mightiest Storms by Patricia Lauber (1996) A History of US by Joy Hakim (2005) Horses by Seymour Simon (2006) Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea by

 Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea by Sy Montgomery (2006)

Note:

K-5 | READING STANDARD 10

E: Given space limitations, the illustrative texts listed above are meant only to show individual titles that are representative of a wide range of topics and genres. (See Appendix B for excerpts of these and other texts illustrative of K-5 text complexity, quality, and range.) At a curricular or instructional level, within and across grade levels, texts need to be selected around topics or themes that generate knowledge and allow students to study those topics or themes in depth. On the next page is an example of progressions of texts building knowledge across grade levels.

*Children at the kindergarten and grade 1 levels should be expected to read texts independently that have been specifically written to correlate to their reading level and their word knowledge. Many of the titles listed above are meant to supplement carefully structured independent reading with books to read along with a teacher or that are read aloud to students to build knowledge and cultivate a joy in reading.



Staying on Topic Within a Grade and Across Grades: How to Build Knowledge Systematically

Building knowledge systematically in English language arts is like giving children various pieces of a puzzle in each grade that, over time, will form one big picture. At a curricular or instructional level, texts—within and across grade levels—need to be selected around topics or themes that systematically develop the knowledge base of students. Within a grade level, there should be an adequate number of titles on a single topic that would allow children to study that topic for a sustained period. The knowledge children have learned about particular topics in early grade levels should then be expanded and developed in subsequent grade levels to ensure an increasingly deeper understanding of these topics. Children in the upper elementary grades will generally be expected to read these texts independently and reflect on them in writing. However, children in the early grades (particularly K-2) should participate in rich, structured conversations with an adult in response to the written texts that are read aloud, orally comparing and contrasting as well as analyzing and synthesizing, in the manner called for by the *Standards*.

Preparation for reading complex informational texts should begin at the very earliest elementary school grades. What follows is one example that uses domainspecific nonfiction titles across grade levels to illustrate how curriculum designers and classroom teachers can infuse the English language arts block with rich, age-appropriate content knowledge and vocabulary in history/social studies, science, and the arts. Having students listen to informational read-alouds in the early grades helps lay the necessary foundation for students' reading and understanding of increasingly complex texts on their own in subsequent grades.

Exemplar Texts on a Topic Across Grades	К	1	2-3	4-5
The Human Body	The five senses and associated	Introduction to the systems of the	Digestive and excretory systems	Circulatory system
Students can begin learning	 body parts My Five Senses by Aliki (1989) 	human body and associated body parts	 What Happens to a Hamburger by Paul Showers (1985) 	 The Heart by Seymour Simon (2006)
about the human body starting in kindergarten	• Hearing by Maria Rius (1985)	 Under Your Skin: Your Amazing Body by Mick Manning (2007) 	 The Digestive System by Christine Taylor-Butler (2008) 	• The Heart and Circulation by Carol Ballard (2005)
and then review and extend their learning during each subsequent grade.	 <i>Sight</i> by Maria Rius (1985) <i>Smell</i> by Maria Rius (1985) 	 Me and My Amazing Body by Joan Sweeney (1999) 	The Digestive System by	The Circulatory System by
subsequent grade.	 Taste by Maria Rius (1985) 	• The Human Body by Gallimard	Rebecca L. Johnson (2006)<i>The Digestive System</i> by Kristin	Kristin Petrie (2007)The Amazing Circulatory System
	• Touch by Maria Rius (1985)	Jeunesse (2007)	Petrie (2007)	by John Burstein (2009)
	Taking care of your body: Overview (hygiene, diet, exercise,	 The Busy Body Book by Lizzy Rockwell (2008) First Encyclopedia of the Human Body by Fiona Chandler (2004) 	Taking care of your body: Healthy eating and nutrition	Respiratory systemThe Lungs by Seymour Simon
	rest) • My Amazing Body: A First Look at Health & Fitness by Pat		• Good Enough to Eat by Lizzy Rockwell (1999)	(2007) • The Respiratory System by
	Thomas (2001) • Get Up and Go! by Nancy	Taking care of your body: Germs, diseases, and preventing illness	• Showdown at the Food Pyramid by Rex Barron (2004)	Susan Glass (2004) The Respiratory System by
	Carlson (2008) • Go Wash Up by Doering	 Germs Make Me Sick by Marilyn Berger (1995) 	Muscular, skeletal, and nervous systems	Kristin Petrie (2007)The Remarkable Respiratory
	 Go Wash Op by Doering Tourville (2008) Sleep by Paul Showers (1997) 	 Tiny Life on Your Body by Christine Taylor-Butler (2005) 	 The Mighty Muscular and Skeletal Systems Crabtree Publishing (2009) 	<i>System</i> by John Burstein (200 Endocrine system
	 <i>Fuel the Body</i> by Doering Tourville (2008) 	 Germ Stories by Arthur Kornberg (2007) 	 Muscles by Seymour Simon (1998) 	• <i>The Endocrine System</i> by Rebecca Olien (2006)
		• All About Scabs by GenichiroYagu (1998)	 Bones by Seymour Simon (1998) 	• The Exciting Endocrine System by John Burstein (2009)
			The Astounding Nervous System Crabtree Publishing (2009)	
			• <i>The Nervous System</i> by Joelle Riley (2004)	





Literacy in All Subjects

6-12



College and Career Readiness Anchor Standards for Reading

The grades 6-12 standards on the following pages define what students should understand and be able to do by the end of each grade span. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

- 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- 2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
- 3. Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

Craft and Structure

- 4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
- 5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
- 6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

- 7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.*
- 8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- 9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

'Please see "Research to Build and Present Knowledge" in Writing for additional standards relevant to gathering, assessing, and applying information from print and digital sources.

Note on range and content of student reading

Reading is critical to building knowledge in history/social studies as well as in science and technical subjects. College and career ready reading in these fields requires an appreciation of the norms and conventions of each discipline, such as the kinds of evidence used in history and science: an understanding of domain-specific words and phrases; an attention to precise details: and the capacity to evaluate intricate arguments, synthesize complex information, and follow detailed descriptions of events and concepts. In history/social studies, for example. students need to be able to analyze, evaluate, and differentiate primary and secondary sources. When reading scientific and technical texts. students need to be able to gain knowledge from challenging texts that often make extensive use of elaborate diagrams and data to convey information and illustrate concepts. Students must be able to read complex informational texts in these fields with independence and confidence because the vast majority of reading in college and workforce training programs will be sophisticated nonfiction. It is important to note that these Reading standards are meant to complement the specific content demands of the disciplines, not replace them.



RH

Reading Standards for Literacy in All Subjects

The standards below begin at grade 6; standards for K-5 reading in history/social studies, science, and technical subjects are integrated into the K-5 Reading standards. The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity.

	Grades 6-8 students:		Grades 9-10 students:		Grades 11-12 students:
Ke	y Ideas and Details				
1.	Cite specific textual evidence to support analysis of primary and secondary sources.	1.	Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.	1.	Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
2.	Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.	2.	Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.	2.	Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
3.	Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered).	3.	Analyze in detail a series of events described in a text; determine whether earlier events caused later ones or simply preceded them.	3.	Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.
Cra	aft and Structure				
4.	Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.	4.	Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social studies.	4.	Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines <i>faction</i> in <i>Federalist</i> No. 10).
5.	Describe how a text presents information (e.g., sequentially, comparatively, causally).	5.	Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.	5.	Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.
6.	Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).	6.	Compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts.	6.	Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.
Int	egration of Knowledge and Ideas				
7.	Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.	7.	Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.	7.	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
8.	Distinguish among fact, opinion, and reasoned judgment in a text.	8.	Assess the extent to which the reasoning and evidence in a text support the author's claims.	8.	Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.
9.	Analyze the relationship between a primary and secondary source on the same topic.	9.	Compare and contrast treatments of the same topic in several primary and secondary sources.	9.	Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.
Ra	nge of Reading and Level of Text Complexit	у			
10.	By the end of grade 8, read and comprehend history/social studies texts in the grades 6-8 text complexity band independently and proficiently.	10.	By the end of grade 10, read and comprehend history/social studies texts in the grades 9-10 text complexity band independently and proficiently.	10.	By the end of grade 12, read and comprehend history/social studies texts in the grades 11-CCR text complexity band independently and proficiently.



RST

Reading Standards for Literacy in All Subjects

	Grades 6-8 students:		Grades 9-10 students:		Grades 11-12 students:
Ke	y Ideas and Details				
1.	Cite specific textual evidence to support analysis of science and technical texts.	1.	Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	1.	Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
2.	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.	2.	Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.	2.	Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
3.	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.	3.	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.	3.	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
Cra	aft and Structure				
4.	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 6-8 texts and topics</i> .	4.	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 9–10 texts and topics</i> .	4.	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 11-12 texts and topics</i> .
5.	Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.	5.	Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., <i>force, friction, reaction force,</i> <i>energy</i>).	5.	Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
6.	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.	6.	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.	6.	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.
Int	egration of Knowledge and Ideas				
7.	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).	7.	Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.	7.	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
8.	Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.	8.	Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.	8.	Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.
9.	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.	9.	Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.	9.	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
Ra	nge of Reading and Level of Text Complexit	У			
10.	By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.	10.	By the end of grade 10, read and comprehend science/technical texts in the grades 9-10 text complexity band independently and proficiently.	10.	By the end of grade 12, read and comprehend science/technical texts in the grades 11-CCR text complexity band independently and proficiently.



College and Career Readiness Anchor Standards for Writing

The grades 6-12 standards on the following pages define what students should understand and be able to do by the end of each grade span. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Text Types and Purposes*

- 1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.
- 2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- 3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

Production and Distribution of Writing

- 4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- 6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

- 7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
- 8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- 9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Note on range and content of student writing

For students, writing is a key means of asserting and defending claims, showing what they know about a subject, and conveying what they have experienced, imagined, thought, and felt. To be college and career readv writers. students must take task, purpose, and audience into careful consideration. choosing words. information. structures. and formats deliberately. They need to be able to use technology strategically when creating, refining, and collaborating on writing. They have to become adept at gathering information, evaluating sources, and citing material accurately. reporting findings from their research and analysis of sources in a clear and cogent manner. They must have the flexibility. concentration. and fluency to produce high-quality firstdraft text under a tight deadline and the capacity to revisit and make improvements to a piece of writing over multiple drafts when circumstances encourage or require it. To meet these goals, students must devote significant time and effort to writing, producing numerous pieces over short and long time frames throughout the year.

*These broad types of writing include many subgenres.

presented.

NHST



Writing Standards for Literacy in All Subjects

The standards below begin at grade 6; standards for K-5 writing in history/social studies, science, and technical subjects are integrated into the K-5 Writing standards. The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity.

	Grades 9–10 students:		Grades 11-12 students:
1.	Write arguments focused on <i>discipline-specific</i> content.	1.	Write arguments focused on <i>discipline-specific</i> content.
	 a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the 		 a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly an thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) an counterclaims in a discipline-appropriate for that anticipates the audience's knowledge level, concerns, values, and possible biases.
	 major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from or supports the argument 		 c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which th are writing. e. Provide a concluding statement or section
	1.	 content. a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section 	 content. a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from or supports the argument



WHST



Writing Standards for Literacy in All Subjects

	Grades 6-8 students:	Grades 9-10 students:	Grades 11-12 students:
Text	t Types and Purposes (continued)		
	 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style and objective tone. f. Provide a concluding statement or section that follows from and supports the information or explanation presented. 	 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic). 	 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).
	(See note; not applicable as a separate requirement)	 (See note; not applicable as a separate requirement) 	 (See note; not applicable as a separate requirement)

6-12 WRITING

Note: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical import. In science and technical subjects, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results.



WHST

Writing Standards for Literacy in All Subjects

Grades 6-8 students: Grades 9-10 students: Grades 11-12 students: **Production and Distribution of Writing** 4. Produce clear and coherent writing in which Produce clear and coherent writing in which Produce clear and coherent writing in which 4. 4. the development, organization, and style are the development, organization, and style are the development, organization, and style are appropriate to task, purpose, and audience. appropriate to task, purpose, and audience. appropriate to task, purpose, and audience. 5. With some guidance and support from peers and 5. Develop and strengthen writing as needed by 5. Develop and strengthen writing as needed by adults, develop and strengthen writing as needed planning, revising, editing, rewriting, or trying planning, revising, editing, rewriting, or trying by planning, revising, editing, rewriting, or trying a a new approach, focusing on addressing what a new approach, focusing on addressing what new approach, focusing on how well purpose and is most significant for a specific purpose and is most significant for a specific purpose and audience have been addressed. audience. audience. 6. Use technology, including the Internet, to produce 6. Use technology, including the Internet, to produce, 6. Use technology, including the Internet, to produce. and publish writing and present the relationships publish, and update individual or shared writing publish, and update individual or shared writing between information and ideas clearly and products, taking advantage of technology's products in response to ongoing feedback, efficiently. capacity to link to other information and to display including new arguments or information. information flexibly and dynamically. Research to Build and Present Knowledge 7. Conduct short research projects to answer a 7 Conduct short as well as more sustained research 7. Conduct short as well as more sustained research question (including a self-generated question), projects to answer a question (including a selfprojects to answer a question (including a selfdrawing on several sources and generating generated guestion) or solve a problem: narrow or generated guestion) or solve a problem: narrow or additional related, focused questions that allow for broaden the inquiry when appropriate; synthesize broaden the inquiry when appropriate; synthesize multiple avenues of exploration. multiple sources on the subject, demonstrating multiple sources on the subject, demonstrating understanding of the subject under investigation. understanding of the subject under investigation. 8. Gather relevant information from multiple print 8. Gather relevant information from multiple 8. Gather relevant information from multiple and digital sources, using search terms effectively; authoritative print and digital sources, using authoritative print and digital sources, using advanced searches effectively; assess the assess the credibility and accuracy of each source; advanced searches effectively; assess the and quote or paraphrase the data and conclusions usefulness of each source in answering the strengths and limitations of each source in terms of others while avoiding plagiarism and following research question; integrate information into the of the specific task, purpose, and audience; integrate information into the text selectively to a standard format for citation. text selectively to maintain the flow of ideas. avoiding plagiarism and following a standard maintain the flow of ideas, avoiding plagiarism and format for citation. overreliance on any one source and following a standard format for citation. 9. Draw evidence from informational texts to support 9. Draw evidence from informational texts to support Draw evidence from informational texts to support 9 analysis reflection, and research. analysis, reflection, and research. analysis, reflection, and research. **Range of Writing** 10. Write routinely over extended time frames (time 10. Write routinely over extended time frames (time 10. Write routinely over extended time frames (time for reflection and revision) and shorter time for reflection and revision) and shorter time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a frames (a single sitting or a day or two) for a frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and range of discipline-specific tasks, purposes, and range of discipline-specific tasks, purposes, and audiences audiences audiences.



College and Career Readiness Anchor Standards for Speaking and Listening

The grades 6-12 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Comprehension and Collaboration

- 1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- 2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- 3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

- 4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
- 5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- 6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Note on range and content of student speaking and listening

To become college and career ready, students must have ample opportunities to take part in a variety of rich. structured conversations—as part of a whole class, in small groups. and with a partner-built around important content in various domains. They must be able to contribute appropriately to these conversations. to make comparisons and contrasts. and to analyze and synthesize a multitude of ideas in accordance with the standards of evidence appropriate to a particular discipline. Whatever their intended major or profession, high school graduates will depend heavily on their ability to listen attentively to others so that they are able to build on others' meritorious ideas while expressing their own clearly and persuasively.

New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. The Internet has accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change.



SL

Speaking and Listening Standards for Literacy in All Subjects

The following standards for grades 6-12 offer a focus for instruction in each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

	Grade 6 students:		Grade 7 students:		Grade 8 students:
Co	mprehension and Collaboration				
1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on <i>grade 6 topics,</i> <i>texts, and issues</i> , building on others' ideas and expressing their own clearly.	1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on <i>grade 7 topics,</i> <i>texts, and issues,</i> building on others' ideas and expressing their own clearly.	1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on <i>grade 8 topics,</i> <i>texts, and issues,</i> building on others' ideas and expressing their own clearly.
	a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.		 Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. 		a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
	b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.		 Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. 		 Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define
	c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.		c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.		 individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant
	 Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. 		d. Acknowledge new information expressed by others and, when warranted, modify their own views.		evidence, observations, and ideas.d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.
2.	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.	2.	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.	2.	Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.
3.	Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	3.	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.	3.	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced
Pre	esentation of Knowledge and Ideas				
4.	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	4.	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	4.	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevan evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
5.	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.	5.	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	5.	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
6.	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	6.	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	6.	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.



SL



Speaking and Listening Standards for Literacy in All Subjects

The CCR anchor standards and high school grade-specific standards work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity.

	Grades 9–10 students:		Grades 11-12 students:
Co	mprehension and Collaboration		
1.	 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. 	1.	 Initiate and participate effectively in a range of collaborative discussions (one-one, in groups, and teacher-led) with diverse partners on <i>grades 11-12 topics, texts, and issues,</i> building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
	 Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. 		 Work with peers to promote civil, democratic discussions and decision- making, set clear goals and deadlines, and establish individual roles as needed.
	c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.		c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.
	d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.		d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
2.	Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.	2.	Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.
3.	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.	3.	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
Pre	esentation of Knowledge and Ideas		
4.	Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	4.	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
5.	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	5.	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
6.	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	6.	Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.



College and Career Readiness Anchor Standards for Language

The grades 6-12 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Conventions of Standard English

- 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use

- 4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
- 5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- 6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Note on range and content of student language use

To be college and career ready in language. students must have firm control over the conventions of standard English. At the same time, they must come to appreciate that language is as at least as much a matter of craft as of rules and be able to choose words, syntax, and punctuation to express themselves and achieve particular functions and rhetorical effects. They must also have extensive vocabularies, built through reading and study, enabling them to comprehend complex texts and engage in purposeful writing about and conversations around content. They need to become skilled in determining or clarifying the meaning of words and phrases they encounter. choosing flexibly from an array of strategies to aid them. They must learn to see an individual word as part of a network of other words—words, for example, that have similar denotations but different connotations. The inclusion of Language standards in their own strand should not be taken as an indication that skills related to conventions, effective language use, and vocabulary are unimportant to reading, writing, speaking, and listening: indeed. they are inseparable from such contexts.



Language Standards for Literacy in All Subjects

The following standards for grades 6-12 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* Beginning in grade 3, skills and understandings that are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking are marked with an asterisk (*).

	Grade 6 students:		Grade 7 students:		Grade 8 students:		
Сс	nventions of Standard English						
1.	 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Ensure that pronouns are in the proper case (subjective, objective, possessive). b. Use intensive pronouns (e.g., <i>myself</i>, <i>ourselves</i>). c. Recognize and correct inappropriate shifts in pronoun number and person.* d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).* e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.* 	1.	 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of phrases and clauses in general and their function in specific sentences. b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.* 	1.	 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. b. Form and use verbs in the active and passive voice. c. Form and use verbs in the indicative, imperative interrogative, conditional, and subjunctive mood. d. Recognize and correct inappropriate shifts in verb voice and mood.* 		
2.	 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly. 	2.	 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use a comma to separate coordinate adjectives (e.g., <i>It was a fascinating, enjoyable movie</i> but not <i>He wore an old[,] green shirt</i>). b. Spell correctly. 	2.	 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break. b. Use an ellipsis to indicate an omission. c. Spell correctly. 		
	owledge of Language						
3.	 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Vary sentence patterns for meaning, reader/listener interest, and style.* b. Maintain consistency in style and tone.* 	3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.*	3.	 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact). 		



Language Standards for Literacy in All Subjects

	Grade 6 students:		Grade 7 students:		Grade 8 students:
Vo	cabulary Acquisition and Use				
4.	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 6 reading and content</i> , choosing flexibly from a range of strategies.	4.	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 7 reading and content</i> , choosing flexibly from a range of strategies.	4.	Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on <i>grade</i> <i>8 reading and content</i> , choosing flexibly from a range of strategies.
	 Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. 		 Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. 		 Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
	b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>audience, auditory, audible</i>).		b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>belligerent, bellicose, rebel</i>).		 b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede).
	c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.		 Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of 		c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
	d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).		 speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). 		d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
5.	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	5.	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	5.	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g. verbal irony,
	a. Interpret figures of speech (e.g., personification) in context.		 a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context. b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words. 		b. Use the relationship between particular words
	 b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. 				to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations
	 Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwasteful, thrifty). 		c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>refined,</i> <i>respectful, polite, diplomatic, condescending</i>).		(definitions) (e.g., bullheaded, willful, firm, persistent, resolute).
6.	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	6.	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	6.	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.



Language Standards for Literacy in All Subjects

Grades 9-10 students:

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 9-10 reading and content*, choosing flexibly from a range of strategies.

- a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
- b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *analyze, analysis, analytical; advocate, advocacy*).
- c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology.
- d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
- 5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text.
 - b. Analyze nuances in the meaning of words with similar denotations.
- Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11-12 reading and content, choosing flexibly from a range of strategies.

Grades 11-12 students:

- a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
- b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception, conceivable*).
- c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.
- d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
- 5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - a. Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text.
 - b. Analyze nuances in the meaning of words with similar denotations.
- 6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.



Language Progressive Skills, by Grade

The following skills, marked with an asterisk (*) in Language standards 1–3, are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking.

Standard				Gra	de(s)			
Standard	3	4	5	6	7	8	9-10	11-12
L.3.1f. Ensure subject-verb and pronoun-antecedent agreement.								
L.3.3a. Choose words and phrases for effect.								
L.4.1f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.								
L.4.1g. Correctly use frequently confused words (e.g., to/too/two; there/their).								
L.4.3a. Choose words and phrases to convey ideas precisely.								
L.4.3b. Choose punctuation for effect.								
L.5.1d. Recognize and correct inappropriate shifts in verb tense.								
L.5.2a. Use punctuation to separate items in a series. [*]								
L.6.1c. Recognize and correct inappropriate shifts in pronoun number and person.								
L.6.1d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).								
L.6.1e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.								
L.6.2a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.								
L.6.3a. Vary sentence patterns for meaning, reader/listener interest, and style. [±]								
L.6.3b. Maintain consistency in style and tone.								
L.7.1c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.								
L.7.3a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.								
L.8.1d. Recognize and correct inappropriate shifts in verb voice and mood.								
L.9-10.1a. Use parallel structure.								

⁺ Subsumed by L.7.3a ⁺ Subsumed by L.9-10.1a ⁺ Subsumed by L.11-12.3a





Literacy in All Subjects

Appendix A

Research Supporting Key Elements of the Standards Glossary of Key Terms



Qo COMMON CORE Literacy in All Subjects **English Language Arts** STATE STANDARDS FOR

Appendix A:

Research Supporting Key Elements of the Standards

Glossary of Key Terms

core, students must be able to read and comprehend independently and proficiently the kinds of complex texts commonly found in college and careers. The first part of this section makes a research-based case for why the complexity of what students read matters. In brief, while reading demands in college, workforce training programs, and life in part of instruction. It introduces a three-part model that blends qualitative and quantitative measures of text com-plexity with reader and task considerations. The section concludes with three annotated examples showing how the after graduation. The second part of this section addresses how text complexity can be measured and made a regular and relatively little attention has been paid to students' ability to read complex texts independently. These conditions model can be used to assess the complexity of various kinds of texts appropriate for different grade levels. have left a serious gap between many high school seniors' reading ability and the reading requirements they will face general have held steady or increased over the last half century, K-12 texts have actually declined in sophistication, comprehend texts of steadily increasing complexity as they progress through school. By the time they complete the One of the key requirements of the Common Core State Standards for Reading is that all students must be able 5

Why Text Complexity Matters

In 2006, ACT, Inc., released a report called *Reading Between the Lines* that showed which skills differentiated those students who equaled or exceeded the benchmark score (21 out of 36) in the reading section of the ACT college admissions test from those who did not. Prior ACT research had shown that students achieving the benchmark score or better in reading—which only about half (51 percent) of the roughly half million test takers in the 2004-2005 academand a 50 percent chance of earning a B or better in such a course.¹ Bui ic year had done—had a high probability (75 percent chance) of earning a C or better in an introductory, credit-bearcourse in U.S. history or psychology (two common reading-intensive courses taken by first-year college students)

read. multiple-choice questions pertaining to passages rated as "complex" on a three-point qualitative rubric described in the report. These findings held for male and female students, students from all racial/ethnic groups, and students from families with widely varying incomes. The most important implication of this study was that a pedagogy focused only Surprisingly, what chiefly distinguished the performance of those students who had earned the benchmark score or better from those who had not was not their relative ability in making inferences while reading or answering questic on "higher-order" or "critical" thinking was insufficient to ensure that students were ready for college and careers: plex texts. Students scoring below benchmark performed no better than chance (25 percent correct) on four-option phrases in context. Instead, the clearest differentiator was students' ability to answer questions associated with comwhat students could read, in terms of its complexity, was at least as important as what they could do with what they related to particular cognitive processes, such as determining main ideas or determining the meaning of words and questions

The ACT report is one part of an extensive body of research attesting to the importance of text complexity in reading achievement. The clear, alarming picture that emerges from the evidence, briefly summarized below², is that while the strong emphasis on increasing text complexity as a key requirement in reading years or so, K-12 texts have, if anything, become less demanding. This finding is the impetus behind the Standards reading demands of college, workforce training programs, and citizenship have held steady or risen over the past fifty

College, Careers, and Citizenship: Steady or Increasing Complexity of Texts and Tasks

place reading, measured in Lexiles, exceeds grade 12 complexity significantly, although there is considerable variation (Stenner, Koons, & Swartz, in press). The vocabulary difficulty of newspapers remained stable over the 1963–1991 period Hayes and his colleagues (Hayes, Wolfer, & Wolfe, 1996) studied. Research indicates that the demands that college, careers, and citizenship place on readers have either held steady or increased over roughly the last fifty years. The difficulty of college textbooks, as measured by Lexile scores, has not decreased in any block of time since 1962; it has in fact, increased over that period (Stenner, Koons, & Swartz, in press Kubota, 2005) found, college professors assign more readings from periodicals than do high school teachers. Workhad actually increased, which is important in part because, as a 2005 College Board study (Milewski, Johnson, The word difficulty of every scientific journal and magazine from 1930 to 1990 examined by Hayes and Ward (1992) in press). Glazer, &

held accountable through exams, papers, presentations, what they read on their own than are most students in high school (Erickson & Strommer, 1991; Pritchard, Wilson, Yamnitz, 2007). College instructors assign readings, not necessarily explicated in class, for which students might Furthermore, students in college are expected to read complex texts with substantially greater independence (i.e. much less scaffolding) than are students in typical K-12 programs. College students are held more accountable for or class discussions. Students in high school, by for which students might be contrast, ò are

¹In the 2008-2009 academic year, only 53 percent of students achieved the reading benchmark score or higher; the increase from 2004-2005 was not statistically significant. See ACT, Inc. (2009).

the relevant literature. See Adams (2009) ²Much of the summary found in the next two sections is heavily influenced by Marilyn Jager Adams's painstaking review o

task demand, coupled with what we see below is a vast gap in text complexity, may help explain why only about half of the students taking the ACT Test in the 2004-2005 academic year could meet the benchmark score in reading in general are prepared for postsecondary reading (ACT, Inc., 2006, 2009). (which also was the case in 2008-2009, the most recent year for which data are available) and why so few students rarely held accountable for what they are able to read independently (Heller & Greenleaf, 2007). This discrepancy in

K-12 Schooling: Declining Complexity of Texts

and a Lack of Reading of Complex Texts Independently

grade 4 and grade 8 texts on the National Assessment of Educational Progress (NAEP). Although legitimate questions can be raised about the tools used to measure text complexity (e.g., Mesmer, 2008), what is relevant in these numbers is the general, steady decline—over time, across grades, and substantiated by several sources—in the difficulty and school and college texts—a gap equivalent to 1.5 standard deviations and more than the Lexile difference between average sentence length and vocabulary level in reading textbooks for a variety of grades. Hayes also found that while science books were more difficult to read than literature books, only books for Advanced Placement (AP) classes had likely also the sophistication of content of the texts students have been asked to read in school since 1962 closer to the present day, Gary L. Williamson (2006) found a 350L (Lexile) gap between the difficulty of end-of-high vocabulary levels equivalent to those of even newspapers of the time (Hayes & Ward, 1992). Carrying the research period to 1991, Hayes, Wolfer, and Wolfe (1996) found precipitous declines (relative to the period from 1946 year decrease from 1963 to 1975 in the difficulty of grade 1, grade 6, and (especially) grade 11 texts. Extending the Despite steady or growing reading demands from various sources, K-12 reading texts have actually trended downward in difficulty in the last half century. Jeanne Chall and her colleagues (Chall, Conard, & Harris, 1977) found a thirteen-Hayes also found that while to 1962) in

expository text makes up the vast majority of the required reading in college and the workplace (Achieve, Inc., 2007 Worse still, what little expository reading students are asked to do is too often of the superficial variety that involves skimming and scanning for particular, discrete pieces of information; such reading is unlikely to prepare students for yet much research supports the conclusion that such text is harder for most students to read than is narrative text (Bowen & Roth, 1999; Bowen, Roth, & McGinn, 1999, 2002; Heller & Greenleaf, 2007; Shanahan & Shanahan, 2008), that students need sustained exposure to expository text to develop important reading strategies (Afflerbach, Pearthe independent reading of complex texts so crucial for college and career readiness, particularly in the case of infor-mational texts. K-12 students are, in general, given considerable scaffolding—assistance from teachers, class discus-sions, and the texts themselves (in such forms as summaries, glossaries, and other text features)—with reading that is son, & Paris, 2008; Kintsch, 1998, 2009; McNamara, Graesser, & Louwerse, in press; Perfetti, Landi, & Oakhill, 2005; reading, for example, is expository (Hoffman, Sabo, Bliss, & Hoy, 1994; Moss & Newton, 2002; Yopp & Yopp, 2006)asked to read very little expository text—as little as 7 and 15 percent of elementary and middle school instructional already less complex overall than that typically required of students prior to 1962.³ What is more, students today are the cognitive demand of true understanding of complex text. van den Broek, Lorch, Linderholm, & Gustafson, 2001; van den Broek, Risden, & Husebye-Hartmann, 1995), and that There is also evidence that current standards, curriculum, and instructional practice have not done enough to foster 2007)

The Consequences: Too Many Students Reading at Too Low a Level

Qo achievement is ers struggle mightily to succeed. The National Center for Education Statistics (NCES) (Wirt, Choy, Rooney, Provasnik, Sen cant. To put the matter bluntly, a high school graduate who is a poor reader is a postsecondary student who must percent of those high school seniors required at least one remedial reading course, the societal impact of low reading 57 percent of those who took one remedial course in a subject other than reading or mathematics. Considering that 1 degree or certificate, compared to 69 percent of the 1992 seniors who took no postsecondary remedial courses and in postsecondary education between 1992 and 2000 and then took any remedial reading course went on to receive a most serious barrier to degree completion" The impact that low reading achievement has on students' readiness for college, careers, and life in general is signifi-Tobin, 2004) reports that although needing to take one or more remedial/developmental courses of any sort low-rs a student's chance of eventually earning a degree or certificate, "the need for remedial reading appears to be the nost serious barrier to degree completion" (p. 63). Only 30 percent of 1992 high school seniors who went on to enroll as profound as its impact on the aspirations of individual students

basic" level, meaning they could exhibit "no more than the most simple and concrete literacy skills"; a similarly small number (13 percent) could read prose texts at the "proficient level," meaning they could perform "more complex and challenging literacy activities" (p. 4). The percent of "proficient" readers had actually declined in a statistically <u>o</u> significant way from 1992 (15 percent). This low and declining achievement rate may be connected to a general lack dropped from 54.0 in 1992 to 46.7 in 2002, while the percent of adults reading *any* book also declined by (Kutner, Greenberg, Jin, Boyle, Hsu, & Dunleavy, 2007) reported that 14 percent of adults read prose texts at "below Reading levels among the adult population are also disturbingly low. The 2003 National Assessment of Adult Literacy reading. As reported by the National Endowment for the Arts (2004), the percent of U.S. adults reading literature > percent

often is entirely appropriate. The expectation that scaffolding will occur with particularly challenging texts is built into the Standards' grade-by-grade text complexity expectations, for example. The general movement, however, should be toward decreasing scaffolding ³As also noted in "Key Considerations in Implementing Text Complexity," below, it is important to recognize that scaffolding and increasing independence both within and across the text complexity bands defined in the Standards

of lack of reading is not only getting worse but doing so at an accelerating rate. Although numerous factors likely contribute to the decline in reading, it is reasonable to conclude from the evidence presented above that the deterio during the same time period. Although the decline occurred in all demographic groups, the steepest decline by far was among 18-to-24- and 25-to-34-year-olds (28 percent and 23 percent, respectively). In other words, the problem ing of complex texts, is a contributing factor. ration in overall reading ability, abetted by a decline in K-12 text complexity and a lack of focus on independent read-

Being able to read complex text independently and proficiently is essential for high achievement in college and the workplace and important in numerous life tasks. Moreover, current trends suggest that if students cannot read challenging texts with understanding—if they have not developed the skill, concentration, and stamina to read such tive global marketplace of goods, services, and ideas. comprehend complex texts and the decline in the richness of text itself. This bodes ill for the ability of Americans to not without value, cannot capture the nuance, subtlety, depth, or breadth of ideas developed through complex text. As Adams (2009) puts it, "There may one day be modes and methods of information delivery that are as efficient and powerful as text, but for now there is no contest. To grow, our students must read lots, and more specifically they must read lots of 'complex' texts—texts that offer them new language, new knowledge, and new modes of thought" tion, they will likely turn to text-free or text-light sources, such as video, podcasts, and tweets. These sources, while meet the demands placed upon them by citizenship in a democratic republic and the challenges of a highly competi cause knowledge is intimately linked with reading comprehension ability, will accelerate the decline in the ability to (p. 182). A turning away from complex texts is likely to lead to a general impoverishment of knowledge, which, betexts—they will read less in general. In particular, if students cannot read complex expository text to gain informa-

those tics (Bettinger & Long, 2009). The consequences of insufficiently high text demands and a lack of accountability for independent reading of complex texts in K-12 schooling are severe for everyone, but they are disproportionately so for students arriving at school from less-educated families are disproportionately represented in many of these statis-It should be noted also that the problems with reading achievement are not "equal opportunity" in their effects who are already most isolated from text before arriving at the schoolhouse door

The Standards' Approach to Text Complexity

thus require increasing sophistication in students' reading comprehension ability (Reading standards 1-9). The Standards thus approach the intertwined issues of what and how student read. difficult a particular text is to read as well as grade-by-grade specifications for increasing text complexity in suc-cessive years of schooling (Reading standard 10). These are to be used together with grade-specific standards that To help redress the situation described above, the Standards define a three-part model for determining how easy or

A Three-Part Model for Measuring Text Complexity

text complexity consists of three equally important parts As signaled by the graphic at right, the Standards' model of

clarity; and knowledge demands. meaning or purpose; structure; language conventionality and to those aspects of text complexity best measured or only dards, qualitative dimensions and qualitative factors refer (1) Qualitative dimensions of text complexity. In the Stanmeasurable by an attentive human reader, such as levels of

sured by especially in long texts, and are thus today typically meaif not impossible for a human reader to evaluate efficiently. quency, sentence length, and text cohesion, that are difficult quantitative dimensions and quantitative factors refer to those aspects of text complexity, such as word length or fre-(2) Quantitative dimensions of text complexity. The terms computer software

tion, text, variables specific to particular readers (such as motivaelements of the model focus on the inherent complexity of (such as purpose and the complexity of the task assigned (3) Reader and task considerations. While the prior two knowledge, and experiences) and to particular tasks

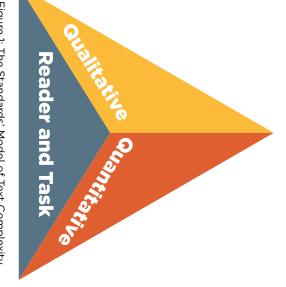


Figure 1: The Standards' Model of Text Complexity

edge of their students and the subject. dent. and the questions posed) must also be considered when determining whether a Such assessments are best made by teachers employing their professional judgment, text is appropriate for a experience, and knowlgiven stu-





with reader and task considerations, might be used with a number of different texts. tative and quantitative, for measuring text complexity, continue with some important considerations for using text complexity with students, and conclude with a series of examples showing how text complexity measures, balance The Standards presume that all three elements will come into play when text complexity and appropriateness are determined. The following pages begin with a brief overview of just some of the currently available tools, both qualibalanced

Qualitative and Quantitative Measures of Text Complexity

curriculum planning. to-use tools are urgently needed to help make text complexity a vital, everyday part of classroom instruction and presently available. However, each should be considered only provisional; more precise, more accurate, and easier-The qualitative and quantitative measures of text complexity described below are representative of the best tools

Qualitative Measures of Text Complexity

ing the complement and sometimes as a corrective to quantitative measures, which, as discussed below, cannot (at least at present) capture all of the elements that make a text easy or challenging to read and are not equally successful in ratqualitative measures, along with professional judgment in matching a text to reader and task, serve as a necessary terms of one or more factors discernible to a human reader applying trained judgment to the task. In the Standards, Using qualitative measures of text complexity involves making an informed decision about the difficulty of a text in complexity of all categories of text.

of robust tools for the qualitative analysis of text complexity. These factors are presented as continua of difficulty rather than as a succession of discrete "stages" in text complexity. Additional development and validation would be needed to translate these or other dimensions into, for example, grade-level- or grade-band-specific rubrics. The texts or high on all of these measures, and some elements of the dimensions are better suited to literary or to informational qualitative factors run from easy (left-hand side) to difficult (right-hand side). Few, if any, authentic texts will be low Built on prior research, the four qualitative factors described below are offered here as a first step in the development

(1) *Levels of Meaning (literary texts) or Purpose (informational texts).* Literary texts with a single level of meaning tend to be easier to read than literary texts with multiple levels of meaning (such as satires, in which the author's literal message is intentionally at odds with his or her underlying message). Similarly, informational texts with an explicitly stated purpose are generally easier to comprehend than informational texts with an implicit, hidden, or obscure purpose

merely supplementary to the meaning of texts of low complexity, whereas texts of high complexity tend to have simi-larly complex graphics, graphics whose interpretation is essential to understanding the text, and graphics that provide an independent source of information within a text. (Note that many books for the youngest students rely heavily on deviate from the conventions of common genres and subgenres, while complex informational texts are more likely to conform to the norms and conventions of a specific discipline. Graphics tend to be simple and either unnecessary or graphics to convey meaning and are flashbacks, flash-forwards, and other manipulations of time and sequence. Simple informational texts are likely not to of high complexity tend to have complex, implicit, and (particularly in literary texts) unconventional structures. Si literary texts tend to relate events in chronological order, while complex literary texts make more frequent use of (2) Structure. Texts of low complexity tend to have simple, well-marked, and conventional structures, whereas texts an exception to the above generalization.) whereas texts of high complexity tend to have simi-Simple

miliar language (3) Language Conventionality and Clarity. Texts that rely on literal, clear, contemporary, and conversational language tend to be easier to read than texts that rely on figurative, ironic, ambiguous, purposefully misleading, archaic or otherwise unfaor on general academic and domain-specific vocabulary.

many assumptions in one or more of those areas depth of their cultural/literary and content/discipline knowledge are generally less complex than are texts that make (4) Knowledge Demands. Texts that make few assumptions about the extent of readers' life experiences and the

Levels of Meaning (literary texts) or Purpose (informational texts)

- Single level of meaning ightarrow Multiple levels of meaning
- Explicitly stated purpose ightarrow Implicit purpose, may be hidden or obscure

Structure

Simple → Complex

Explicit → Implicit

- Conventional \rightarrow Unconventional (chiefly literary texts)
- Events related in chronological order ightarrow Events related out of chronological order (chiefly literary texts)
- . Traits of a common genre or subgenre ightarrowTraits specific to a particular discipline (chiefly informational texts)
- Simple graphics ightarrow Sophisticated graphics
- and may Graphics provide information not otherwise conveyed in the text the text → Graphics essential to understanding the text

Language Conventionality and Clarity

- Literal \rightarrow Figurative or ironic
- Clear ightarrow Ambiguous or purposefully misleading
- Contemporary, familiar ightarrow Archaic or otherwise unfamiliar
- Conversational → General academic and domain-specific

Knowledge Demands: Life Experiences (literary texts)

- Simple theme ightarrow Complex or sophisticated themes
- Single themes ightarrow Multiple themes
- Common, everyday experiences or clearly fantastical situations ightarrow Experiences distinctly different from one's own
- Single perspective ightarrow Multiple perspectives
- Perspective(s) like one's own \rightarrow Perspective(s) unlike or in opposition to one's own

Knowledge Demands: Cultural/Literary Knowledge (chiefly literary texts)

- Everyday knowledge and familiarity with genre conventions required \mathbf{V} Cultural and literary knowledge useful
- texts) Low intertextuality (few if any references/allusions to other texts) ightarrow High intertextuality (many references/allusions to other

Knowledge Demands: Content/Discipline Knowledge (chiefly informational texts)

- content knowledge required Everyday knowledge and familiarity with genre conventions required $\mathbf{1}$ Extensive, perhaps specialized discipline-specific
- . other texts) Low intertextuality (few if any references to/citations of other texts) ightarrow High intertextuality (many references to/citations ç

Adapted from ACT, Inc. (2006). Reading between the lines: What the ACT reveals about college readiness in reading. Iowa City, IA: Author; Carn Council on Advancing Adolescent Literacy. (2010). *Time to act: An agenda for advancing adolescent literacy for college and carees ruccess.* New York: Carnegie Corporation of New York; Chall, J. S., Bissex, G. L., Conrad, S. S., & Harris-Sharples, S. (1996). *Collicative actives and writers. Cambridge, UK: Brookline Books: Hears, K. & Biggan, S. (2004). A discussion of "increasing text complexity."* Published by the New Hampshire, Rhode Island, and Vermont departments of education as part of the New England Common Assessment Program (NECAP). Retrieved from www.nciea.org/publications/TextComplexity_KH05.pdf Carnegi

Quantitative Measures of Text Complexity

quickly if text complexity is to be used effectively in the classroom and curriculum. A number of quantitative tools exist to help educators assess aspects of text complexity that are better measured by algorithm than by a human reader. The discussion is not exhaustive, nor is it intended as an endorsement of one method or program over another. Indeed, because of the limits of each of the tools, new or improved ones are needed

among ideas and thereby reduce the inference load on readers than familiar words. The higher the proportion of less familiar words in a text, the theory goes, the harder that text is to read. While these readability formulas are easy to use and readily available—some are even built into various word short words and/or sentences would be. Some formulas, such as the Dale-Chall Readability Formula, substitute word used Flesch-Kincaid Grade Level test, typically use word length and sentence length as proxies for semantic and syntactic complexity, respectively (roughly, the complexity of the meaning and sentence structure). The assump these sentences lack the cohesive devices, such as transition words and phrases, that help establish logical links frequency for word length as a factor, the assumption here being that less familiar words are harder to comprehend text with many long words and/or sentences is thus rated by these formulas as harder to read than a text with many tion behind these formulas is that longer words and longer sentences are more difficult to read than shorter ones; Numerous formulas exist for measuring the readability of various types of texts. Such formulas, including the widely inherently hard to read. In fact, series of short, choppy sentences can pose problems for readers precisely because processing applications—their chief weakness is that longer words, less familiar words, and longer sentences are not ۵

the Lexile Framework, ATOS puts students and texts on the same scale. contribute to text difficulty. In response to such concerns, MetaMetrics has indicated that it will release the qualita-tive ratings it assigns to some of the texts it rates and will actively seek to determine whether one or more addition older students. For this reason and others, it is possible that factors other than word familiarity and sentence length students. Because it too relies on word familiarity and sentence length as proxies for semantic and syntactic ficulty (estimated grade level), word length, sentence length, and text length (measured in words) as its factors. Like language to convey sophisticated ideas, as is true of much high-quality fiction written for adults and appropriate for ity, the Lexile Framework, like traditional formulas, may underestimate the difficulty of texts that use simple, familiar based on student performance on the instrument; some reading programs then use these scores to assign texts to length to produce a single measure, called a Lexile, of a text's complexity. The most important difference between the Like Dale-Chall, the Lexile Framework for Reading, developed by MetaMetrics, Inc., uses word frequency and sentence formula associated with the Accelerated Reader program developed by Renaissance Learning. ATOS uses word diffactors can and should be added to its quantitative measure. Other readability formulas also exist, such as the ATOS Lexile Framework can place both readers and texts on the same scale. Certain reading assessments yield Lexile scores Lexile system and traditional readability formulas is that traditional formulas only assign a score to texts, whereas the additiona complex

cohesion texts are not necessarily "better" than low-cohesion texts, but they are easier to read contrast, requires the reader him- or herself to make many of the connections needed to comprehend the text. Highships among words, sentences, and ideas using repetition, concrete language, and the like; a low-cohesion text, tightly the text holds together. A high-cohesion text does a good deal of the work for the reader by signaling relation-A nonprofit service operated at the University of Memphis, Coh-Metrix attempts to account for factors in addition to those measured by readability formulas. The Coh-Metrix system focuses on the cohesiveness of a text—basically, how ç

grade bands. yet widely available to the public, nor have the results they yield been calibrated to the Standards' text complexity to isolate the most revealing, informative factors from among the many they consider, but these "key factors" are not daunting to the layperson or even to a professional educator unfamiliar with the indices. Coh-Metrix staff have worked tools yet The standard Coh-Metrix report includes information on more than sixty indices related to text cohesion, to come The greatest value of these factors may well be the promise they offer of more advanced and usable so it can be

Reader and Task Considerations

expectation that educators will employ professional judgment to match texts to particular students and tasks. Numer-ous considerations go into such matching. For example, harder texts may be appropriate for highly knowledgeable or may require the kind of information contained only in similarly complex texts quired to read harder texts that tell a story or contain information in which they are deeply interested. Complex tasks skill up to the level required by the Standards. Highly motivated readers are often willing to put in the extra effort reskilled readers, and easier texts may be suitable as an expedient for building struggling readers' knowledge or reading The use of qualitative and quantitative measures to assess text complexity is balanced in the Standards' model by the

Numerous factors Understanding: propriate for him or her. associated with the individual reader are relevant when determining whether or her. The RAND Reading Study Group identified many such factors in the 2C ner a given text is ap-2002 report *Readinc* Reading fo

۵ ability, inferencing, visualization); motivation (a purpose for reading, interest in the content, self-efficacy The reader brings to the act of reading his or her cognitive capabilities (attention, memory, critical analytic reader); knowledge (vocabulary and topic knowledge, linguistic and discourse knowledge, knowledge of

comprehension strategies); and experiences

As part of describing the activity of reading, the RAND group also named important task-related variables, includ-ing the reader's purpose (which might shift over the course of reading), "the type of reading being done, such as skimming (getting the gist of the text) or studying (reading the text with the intent of retaining the information for a period of time)," and the intended outcome, which could include "an increase in knowledge, a solution to some realworld problem, and/or engagement with the text."4 ۵

Key **Considerations in Implementing Text Complexity**

Texts and Measurement Tools

text complexity tools should follow the release of the Standards as quickly as possible. In the meantime, the Stan-dards recommend that multiple quantitative measures be used whenever possible and that their results be confirmed or overruled by a qualitative analysis of the text in question. tools described above has its limitations, and none is completely accurate. The development of new and improved The tools for measuring text complexity are at once useful and imperfect. Each of the qualitative and quantitative

for prose and dramatic texts. Until such time as quantitative tools for capturing poetry's difficulty are developed, de-termining whether a poem is appropriately complex for a given grade or grade band will necessarily be a matter of a qualitative assessment meshed with reader-task considerations. Furthermore, texts for kindergarten and grade 1 may expert teachers drawing on classroom experience. readers in acquiring written language. The Standards' poetry and K-1 text exemplars were placed into grade bands by not be appropriate for quantitative analysis, as they often contain difficult-to-assess features designed to aid early Certain measures are less valid or inappropriate for certain kinds of texts. Current quantitative measures are suitable

terintuitive result emerges because works such as *Grapes* often express complex ideas in relatively commonplace language (familiar words and simple syntax), especially in the form of dialogue that mimics everyday speech. Until widely available quantitative tools can better account for factors recognized as making such texts challenging, includ-Many current quantitative measures underestimate the challenge posed by complex narrative fiction. Quantitative measures of text complexity, particularly those that rely exclusively or in large part on word- and sentence-level factors, tend to assign sophisticated works of literature excessively low scores. For example, as illustrated in example 2 complexity when evaluating narrative fiction intended for students in grade 6 and above. ing multiple levels of meaning and mature themes, preference should likely be given to qualitative measures of text work for Reading, rate the Pulitzer Prize-winning novel Grapes of Wrath as appropriate for grades 2-3. This counbelow, some widely used quantitative measures, including the Flesch-Kincaid Grade Level test and the Lexile Frame-

reading at the college and career readiness level by no later than the end of high school ward its trajectory of reading comprehension development through the grades to indicate that all students should be example, has realigned its Lexile ranges to match the Standards' text complexity grade bands and has adjusted up measures should identify the college- and career-ready reading level as one endpoint of the scale. MetaMetrics, for tive scales of text complexity should be anchored at one end by descriptions of texts representative of those re-quired in typical first-year credit-bearing college courses and in workforce training programs. Similarly, quantitative Measures of text complexity must be aligned with college and career readiness expectations for all students. Qualita

Text Complexity Grade Band in the Standards	Old Lexile Ranges	Lexile Ranges Aligned to CCR expectations
K-1	N/A	N/A
2-3	450-725	450-790
4-5	645-845	770-980
6-8	860-1010	955-1155
9-10	960-1115	1080-1305
11-CCR	1070-1220	1215-1355

Figure 3: Text Complexity Grade Bands and Associated Lexile Ranges (in Lexiles)

Readers and Tasks

experiences must also come into play in text selection. Students deeply interested in a given topic, them, both of which the Standards allow for. As noted above, such factors as students' motivation, knowledge, and ties to stretch their reading abilities but also to experience the satisfaction and pleasure of easy, fluent reading within development of this ability in individual students is unlikely to occur at an unbroken pace. Students need opportuni-*Students' ability to read complex text does not always develop in a linear fashion.* Although the progression of Read-ing standard 10 (see below) defines required grade-by-grade growth in students' ability to read complex text, the the general movement during a given school year is toward texts of higher levels of complexity. texts that are easier than those required for a given grade band should feel free to continue to use them so long as harder texts than they would normally be required to. Conversely, teachers who have had success using particular engage with texts on that subject across a range of complexity. Particular tasks may also require students to read for example, may

given the support needed to enable them to read at a grade-appropriate level of complexity. hand, students who struggle greatly to read texts within (or even below) their text complexity grade band must be attention and resources necessary to develop their reading ability at an appropriately advanced pace. On the other Students reading well above and well below grade-band level need additional support. Students for whom texts within their text complexity grade band (or even from the next higher band) present insufficient challenge must be given the

grades 2-3 text complexity band. Although such support is educationally necessary and desirable, instruction must move generally toward *decreasing scaffolding* and *increasing independence*, with the goal of students reading in-dependently and proficiently within a given grade band by the end of the band's final year (continuing the previous example, the end of grade 3) ample, many students just entering grade 2 will need some support as they read texts that are advanced for the *levels of text complexity.* As they enter each new grade band, many students are likely to need at least some extra help as they work to comprehend texts at the high end of the range of difficulty appropriate to the band. For ex-Even many students on course for college and career readiness are likely to need scaffolding as they master higher

As illustrated in figure 4, text complexity in the Standards is defined in grade bands: grades 2–3, 4–5, 6–8, 9–10, and 11–CCR.⁵ Students in the first year(s) of a given band are expected by the end of the year to read and comprehend proficiently within the band, with scaffolding as needed at the high end of the range. Students in the last year of a band are expected by the end of the year to read and comprehend independently and proficiently within the band.

Grade(s)	Reading Standard 10 (individual text types omitted)
×	Actively engage in group reading activities with purpose and understanding.
_	With prompting and support, read prose and poetry [informational texts] of appropriate complexity for grade 1.
N	By the end of the year, read and comprehend literature [informational texts] in the grades 2-3 text complexity band proficiently, with scaffolding as needed at the high end of the range.
ы	By the end of the year, read and comprehend literature [informational texts] at the high end of the grades 2-3 text complexity band independently and proficiently.
4	By the end of the year, read and comprehend literature [informational texts] in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
σ	By the end of the year, read and comprehend literature [informational texts] at the high end of the grades 4-5 text complexity band independently and proficiently.
σ	By the end of the year, read and comprehend literature [informational texts, history/social studies texts, science/technical texts] in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
7	By the end of the year, read and comprehend literature [informational texts, history/social studies texts, science/technical texts] in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
ω	By the end of the year, read and comprehend literature [informational texts, history/social studies texts, science/technical texts] at the high end of the grades 6-8 text complexity band independently and proficiently.
	By the end of grade 9, read and comprehend literature [informational texts, history/social studies texts, science/technical texts] in the grades 9-10 text complexity band proficiently, with scaffolding as needed at the high end of the range.
9-10	By the end of grade 10, read and comprehend literature [informational texts, history/social studies texts, science/technical texts] at the high end of the grades 9-10 text complexity band independently and proficiently.
11-12	By the end of grade 11, read and comprehend literature [informational texts, history/social studies texts, science/technical texts] in the grades 11-CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.
	By the end of grade 12, read and comprehend literature [informational texts, history/social studies texts, science/technical texts] at the high end of the grades 11-CCR text complexity band independently and proficiently.

Figure 4: The Progression of Reading Standard 10

Writing

Definitions of the Standards' Three Text Types

Argument

and explaining cause and effect. These kinds of expository structures are steps on the road to argument. In grades variety of methods to extend and elaborate their work by providing examples, offering reasons for their assertions. of their claims. Although young children are not able to produce fully developed logical arguments, they develop a in the form of statements or conclusions that answer questions or address problems. Using data in a scientifically ac-ceptable form, students marshal evidence and draw on their understanding of scientific concepts to argue in support the evidence, and they argue for a historically or empirically situated interpretation. In science, students make claims students analyze evidence from multiple primary and secondary sources to advance a claim that is best supported by their interpretations or judgments with evidence from the text(s) they are writing about. In history/social studies, reader's part, or to ask the reader to accept the writer's explanation or evaluation of a concept, issue, or problem. An argument is a reasoned, logical way of demonstrating that the writer's position, belief, or conclusion is valid. In English language arts, students make claims about the worth or meaning of a literary work or works. They defend K-5, the term "opinion" is used to refer to this developing form of argument. Arguments are used for many purposes—to change the reader's point of view, to bring about some action on the

Informational/Explanatory Writing

authors blend genres?). To produce this kind of writing, students draw from what they already know and from primary and secondary sources. With practice, students become better able to develop a controlling idea and a coherent focus on a topic and more skilled at selecting and incorporating relevant examples, facts, and details into their writing. such as literary analyses, scientific and historical reports, summaries, and précis writing as well as forms of workplace and functional writing such as instructions, manuals, memos, reports, applications, and résumés. As students advance variety of disciplines and domains through the grades, they expand their repertoire of informational/explanatory genres and use them effectively in to illustrate a point. Informational/explanatory writing includes a wide array of genres, including academic genres ferentiating different types or parts; comparing or contrasting ideas or concepts; and citing an anecdote or a scenario They are also able to use a variety of techniques to convey information, such as naming, defining, describing, or difhow things work (How does the legislative branch of government function?); and why things happen (Why do some size, function, or behavior (How big is the United States? What is an X-ray used for? How do penguins find food?); es matters such as types (What are the different types of poetry?) and components (What are the parts of a motor?); related purposes: to increase readers' knowledge of a subject, to help readers better understand a procedure or pro-cess, or to provide readers with an enhanced comprehension of a concept. Informational/explanatory writing address-Informational/explanatory writing conveys information accurately. This kind of writing serves one or more closely ۵

In short, arguments are used for persuasion and explanations for clarification. Arguments seek to make people believe that something is true or to persuade people to change their beliefs or be-havior. Explanations, on the other hand, start with the assumption of truthfulness and answer questions about why or how. Their aim is to make the reader understand rather than to persuade him or her to accept a certain point of view. Although information is provided in both arguments and explanations, the two types of writing have different aims

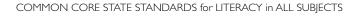
relevant and sufficient evidence. definitions for support. When writing an argument, the writer supports his or her claim(s) with sound reasoning and cause an argument deals with whether the main claim is true, it demands empirical descriptive evidence, statistics, or ena, states of affairs, objects, terminology, and so on. However, in an argument, the writer not only gives information but also presents a case with the "pros" (supporting ideas) and "cons" (opposing ideas) on a debatable issue. Be-Like arguments, explanations provide information about causes, contexts, and consequences of processes, phenom-

Narrative Writing

Narrative writing conveys experience, either real or imaginary, and uses time as its deep structure. It can be used for many purposes, such as to inform, instruct, persuade, or entertain. In English language arts, students produce narratives that take the form of creative fictional stories, memoirs, anecdotes, and autobiographies. Over time, they learn to provide visual details of scenes, objects, or people; to depict specific actions (for example, movements, gestures,

Creative Writing beyond Narrative

The narrative category does not include all of the possible forms of creative writing, such as many types of poetry. The Standards leave the inclusion and evaluation of other such forms to teacher discretion.





acters' personalities and motives; and to manipulate pace to highlight the significance of events and create tension and suspense. In history/social studies, students write narrative accounts about individuals. They also construct event models of what happened, selecting from their sources only the most relevant information. In science, students write different narrative strategies. postures, and expressions); to use dialogue and interior monologue that provide insight into the narrator's and chartheir procedures and (perhaps) reach the same results. With practice, students expand their repertoire and control of narrative descriptions of the step-by-step procedures they follow in their investigations so that others can replicate event

Texts that Blend Types

dent writing can also cross the boundaries Space In Between" found in Appendix C. Skilled writers many times use a blend of these three text types to accomplish their purposes. For example, The Longitude *Prize*, included above and in Appendix B, embeds narrative elements within a largely expository structure. Effective stu-dent writing can also cross the boundaries of type, as does the grade 12 student sample "Fact vs. Fiction and All the Grey

The Special Place of Argument in the Standards

gaging in argument (both oral and written) when they enter col-lege. He claims that because argument is not standard in most counterclaims in opposition to their own assertions. deeply, assess the validity of their own thinking, and anticipate surface knowledge is required: students must think critically and or more perspectives on a topic or issue, something far beyond forces a writer to evaluate the strengths and weaknesses of mul-tiple perspectives. When teachers ask students to consider two school curricula, only 20 percent of those who enter college are conflicts" so that students are adept at understanding and ental to being educated. The university is largely an "argument cul-ture," Graff contends; therefore, K-12 schools should "teach the to college and career readiness. English and education professor Gerald Graff (2003) writes that "argument literacy" is fundamenments on substantive topics and issues, as this ability is critical to college and career readiness. English and education professor calls argument the soul of an education because argument prepared in this respect. Theorist and critic Neil Postman (1997) particular emphasis on students While all three text types are important, the Standards put ability to write sound argu-

of their attempt to explain to new college students the major ney (n.d.) of the University of Chicago Writing Program. As part serted eloquently by Joseph M. Williams and Lawrence McEner-The unique importance of argument in college and careers is as

who liams and McEnerney define argument not as differences between good high school and college writing, Wilintensely interested in getting to the bottom of things cooperatively "wrangling" but as "a serious and focused conversation among people

are

evaluating the thinking and writing of others.) (ch. 1) (And part of the value of doing your own thinking and writing is that it makes you much better at ones. In an Age of Information, what most professionals do is research, think, and make arguments plain those decisions—usually in writing—to others who have a stake in your decisions being sound will do research, think about what you find, make decisions about complex matters, and then exyou all to become professional scholars, but because in just about any profession you pursue, you form . . read, do research, gather data, analyze it, think about it, and then communicate it to readers in a Those values are also an integral part of your education in college. For four years, you are asked to . which enables them to assess it and use it. You are asked to do this not because we expect

are also heavily emphasized in the Standards. ney also establish argument's close links to research in particular and to knowledge building in general, both of which In the process of describing the special value of argument in college- and career-ready writing, Williams and McEner-

curriculum surveys, including those conducted by the College Board (Milewski, Johnson, Glazer, & Kubota, 2005) and with "write to convey information" as the most important type of writing needed by incoming college students. ness. A 2009 ACT national curriculum survey of postsecondary instructors of composition, freshman English, and survey of American literature courses (ACT, Inc., 2009) found that "write to argue or persuade readers" was virtually tied Much evidence supports the value of argument generally and its particular importance to college and career readi-Othei



"Argument" and "Persuasion"

the audience or the character or credentials than either the emotions the writing evokes acter, or authority of the writer (or speaker). strategy is an appeal to the credibility, charvariety of persuasive strategies. One common particularly important form of college- and emphasis on writing logical arguments of the writer. The Standards place specia ness of the claims and proofs offered rather cause of the perceived merit and reasonablethe other hand, convinces the audience becan sway an audience. A logical argument, on sense of identity, or emotions, any of which is an appeal to the audience's self-interest, more likely to believe what they say. Another edgeable and trustworthy, audiences are When writers establish that they are knowl-When writing to persuade, writers employ a career-ready writing as ۵ ∃



the states of Virginia and Florida⁶, also found strong support for writing arguments as a key part of instruction. The 2007 writing framework for the National Assessment of Educational Progress (NAEP) (National Assessment Governing Board, 2006) assigns persuasive writing the single largest targeted allotment of assessment time at grade 12 (40 percent, versus 25 percent for narrative writing and 35 percent for informative writing). (The 2011 prepublication nations.' grade 12, allotting 40 percent to writing to explain and 20 percent to writing to convey experience.) Writing arguframework [National Assessment Governing Board, 2007] maintains the 40 percent figure for persuasive writing at ments or writing to persuade is also an important element in standards frameworks for numerous high-performing

of evidence. and examples," "take and maintain a position on an issue," and "support claims with multiple and appropriate sources ary faculty gave high ratings to such argument-related skills as "develop ideas by using some specific reasons, details California, 2002) found that among the most important skills expected of incoming students were articulating a clear thesis; identifying, evaluating, and using evidence to support or challenge the thesis; and considering and incorporating counterarguments into their writing. On the 2009 ACT national curriculum survey (ACT, Inc., 2009), postsecondthe Academic Senates of the California Community Colleges, the California State University, and the University of colleges, California State University campuses, and University of California campuses (Intersegmental Committee of Specific skills central to writing arguments are also highly valued by postsecondary educators. A 2002 survey of instructors of freshman composition and other introductory courses across the curriculum at California's community

first century. broadly important for the literate, educated person living in the diverse, information-rich environment of the twentythe goal is not victory but a good decision, one in which all arguers are at risk of needing to alter their views, one in which a participant takes seriously and fairly the views different from his or her own" (pp. 16-17). Such capacities are (1996) puts it in Teaching the Argument in Writing, the proper context for thinking about argument is one "in which The value of effective argument extends well beyond the classroom or workplace, however. As Richard Fulkerson



⁷See,

Speaking and Listening

The Special Role of Speaking and Listening in K-5 Literacy

individual) and *expressive language* (language that is generated and produced by an individual). the distinction linguists make between receptive language (language that is heard, processed, and understood by an and writing (Fromkin, Rodman, & Hyams, 2006; Hulit, Howard, & Fahey, 2010; Pence & Justice, 2007; Stuart, Wright, sides having intrinsic value as modes of communication, listening and speaking are necessary prerequisites of reading If literacy levels are to improve, the aims of the English language arts classroom, especially in the earliest grades, must include oral language in a purposeful, systematic way, in part because it helps students master the printed word. Be-Grigor, & Howey, 2002). The interrelationship between oral and written language is illustrated in the table below, using

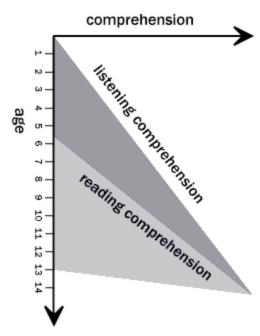
Figure 1	Figure 14: Receptive and Expressive Oral and Written Language	l and Written Language
	Receptive Language	Expressive Language
Oral Language	Listening	Speaking
Written Language	Reading (decoding + comprehension)	Writing (handwriting, spelling, written composition)

written composition)

Hart & Risley, 1995; Hoover & Gough, 1990: Snow, Burns, & Griffin, 1998). ies as to what children can read and understand no matter how well they can decode (Catts, Adolf, & Weismer, 2006; their facility in learning to read and write: listening and speaking vocabulary and even mastery of syntax set boundarlanguage is Oral language development precedes and is the foundation for written language development; in other words, primary and written language builds on it. Children's oral language competence is strongly predictive of oral

words before they can produce and use them. For children in preschool and the early grades, receptive and expressive abilities do not develop simultaneously or at the same pace: receptive language generally precedes expressive language. Children need to be able to understand

more words orally, were better readers. In short, early language advantage persists and manifests itself in higher lev-els of literacy. A meta-analysis by Sticht and James (1984) indicates that the importance of oral language extends well beyond the earliest grades. As illustrated in the graphic below, Sticht and James found evidence strongly suggesting ten that children's listening comprehension outpaces reading comprehension until the middle school years language and reading comprehension. The preschoolers who had heard more words, and subsequently had learned students were in grade 3, their early language competence from the preschool years still accurately predicted their in the context of their early family life and then at school, found that the total number of words children had heard as preschoolers predicted how many words they understood and how fast they could learn new words in kindergar-Oral language is particularly important for the youngest students. Hart and Risley (1995), who studied young children Preschoolers who had heard more words had larger vocabularies once in kindergarten. Furthermore, when the (grades 6-8)





structional time to building children's listening skills, as called for in the Standards. The early grades should not focus on decoding alone, nor should the later grades pay attention only to building reading comprehension. Time should be children with the skills they will need to decode and encode. devoted to reading fiction and content-rich selections aloud to young children, just as it is to providing those same oral and written language, exploiting the influence of oral language on a child's later ability to read by allocating in-The research strongly suggests that the English language arts classroom should explicitly address the link between be

second language and children who have not been exposed at home to the kind of language found in written texts (Dickinson & Smith, 1994). Ensuring that all children in the United States have access to an excellent education requires that issues of oral language come to the fore in elementary classrooms This focus on oral language is of greatest importance for the children most at risk—children for whom English is ۵

Read-Alouds and the Reading-Speaking-Listening Link

on them in writing. However, children in the early grades—particularly kindergarten through grade 3—benefit from participating in rich, structured conversations with an adult in response to written texts that are read aloud, orally comparing and contrasting as well as analyzing and synthesizing (Bus, Van Ijzendoorn, & Pellegrini, 1995; Feitelstein, Goldstein, Iraqui, & Share, 1993; Feitelstein, Kita, & Goldstein, 1986; Whitehurst et al., 1988). The Standards acknowlfor grades 2-3 standards and by offering in Appendix B an extensive number of read-aloud text exemplars appropriate for K-1 and edge the importance of this aural dimension of early learning by including a robust set of K-3 Speaking and Listening Generally, teachers will encourage children in the upper elementary grades to read texts independently and reflect

read by themselves for independent reading by students; read-alouds at this level should supplement and enrich what students are able to need to be read aloud exclusively, some titles selected for grades 2-5 may be appropriate for read-alouds as well as then free to focus their mental energy on the words and ideas presented in the text, and they will eventually be better prepared to tackle rich written content on their own. Whereas most titles selected for kindergarten and grade 1 will ing, granting them access to content that they may not be able to read and understand by themselves. Children are or nonfiction selection aloud, teachers allow children to experience written language without the burden of decodread to as well as through reading, with the balance gradually shifting to reading independently. By reading a story Because, as indicated above, children's listening comprehension likely outpaces reading comprehension until the for reading independently. Reading aloud to students in the upper grades should not, however, be used as a substitute middle school years, it is particularly important that students in the earliest grades build knowledge through being

Overview

The Standards take a hybrid approach to matters of conventions, knowledge of language, and vocabulary. As noted in the table below, certain elements important to reading, writing, and speaking and listening are included in those strands to help provide a coherent set of expectations for those modes of communication.

Figure 16: Elements of the Language Standards in the Reading, Writing, and Speaking and Listening Strands

Strand	Standard
Reading	R.CCR.4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
Writing	W.CCR.5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
Speaking and Listening	SL.CCR.6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

In many respects, however, conventions, knowledge of language, and vocabulary extend across reading, writing, speaking, and listening. Many of the conventions-related standards are as appropriate to formal spoken English as they are to formal written English. Language choice is a matter of craft for both writers and speakers. New words an phrases are acquired not only through reading and being read to but also through direct vocabulary instruction and (particularly in the earliest grades) through purposeful classroom discussions around rich content and

The inclusion of Language standards in their own strand should not be taken as an indication that skills related to conventions, knowledge of language, and vocabulary are unimportant to reading, writing, speaking, and listening; indeed, they are inseparable from such contexts.

Conventions and Knowledge of Language

Teaching and Learning the Conventions of Standard English

Development of Grammatical Knowledge

understandings that students are to be introduced to in basic ways at lower grades but that are likely in need of being 8) and voice (active and passive voice in grade 8). Second, the Standards identify with an asterisk (*) certain skills and present, past, and future tenses; later instruction should extend students' knowledge of verbs to other tenses (pro-gressive and perfect tenses[®] in grades 4 and 5), mood (modal auxiliaries in grade 4 and grammatical mood in grade levels of sophistication. For instance, instruction on verbs in early elementary school (K-3) should address simple These errors are often signs of language development as learners synthesize new grammatical and usage knowledge with their current knowledge. Thus, students will often need to return to the same grammar topic in greater complex-ity as they move through K-12 schooling and as they increase the range and complexity of the texts and communicaconventions as they learn new, more complex grammatical structures or new usages of English, such as in collegelearners often begin making new errors and seem to lose their mastery of particular grammatical structures or print Grammar and usage development in children and in adults rarely follows a linear path. Native speakers and language knowledge in two ways. First, the Standards return to certain important language topics in higher grades at greater tive contexts in which they read and write. The Standards account for the recursive, ongoing nature of grammatical level persuasive essays (Bardovi-Harlig, 2000; Bartholomae, 1980; DeVilliers & DeVilliers, 1973; Shaughnessy, 1979)

notion here and throughout for the sake of accessibility. [®]Though progressive and perfect are more correctly *aspects* of verbs rather than *tenses*, the Standards use the more familia

retaught and relearned in subsequent grades as students' writing and speaking matures and grows more complex. (See "Progressive Language Skills in the Standards," below.)

Making Appropriate Grammar and Usage Choices in Writing and Speaking

this sort of instruction in a number of ways, most directly through a series of grade-specific standards associated with Language CCR standard 3 that, beginning in grade 1, focuses on making students aware of language variety. if they are taught simply to vary their grammar and language to keep their writing "interesting," they may actually become more confused about how to make effective language choices (Lefstein, 2009). The Standards encourage dents make purposeful language choices in their writing and speaking (Fogel & Ehri, 2000; Wheeler & Swords, that exist and address differences in grammatical structure and usage between these varieties in order to help stuusage choices to be effective. Thus, grammar and usage instruction should acknowledge the many varieties of English of different disciplines (Schleppegrell, 2001). Furthermore, in the twenty-first century, students must be able to com-municate effectively in a wide range of print and digital texts, each of which may require different grammatical and ten standard English (Biber, 1991; Krauthamer, academically and professionally. Yet there is great variety in the language and grammar features of spoken and writ-Students must have a strong command of the grammar and usage of spoken and written standard English to succeed Students must also be taught the *purposes* for using particular grammatical features in particular disciplines or texts; 1999), of academic and everyday standard English, and of the language 2004)

Using Knowledge of Grammar and Usage for Reading and Listening Comprehension

Gargani, students analyze setting, character, and author's craft in great works of literature. Teaching about the grammatical matical structures of nonstandard dialects can help students understand how accomplished writers such as Harper Lee, Langston Hughes, and Mark Twain use various dialects of English to great advantage and effect, and can help RAND Reading Study Group, 2002). At the elementary level, for example, students can use knowledge of verbs to edge of vocabulary, to comprehend complex academic texts (García & Beltrán, 2003; Short & Fitzsimmons, 2007 patterns found in specific disciplines has also been shown to help English language learners' reading comprehension help them understand the plot and characters in a text (Williams, 2005). 2005). Researchers recommend that students be taught to use knowledge of grammar and usage, as well as knowl-Grammatical knowledge can also aid reading comprehension and interpretation (Gargani, 2006; Williams, 2000 in general and reading comprehension in history classrooms in particular (Achugar, Schleppegrell, & Oteíza, 2007; 2006). At the secondary level, learning the gram-

rate and rich interpretations in their reading and listening use this understanding to make more purposeful and effective choices in their writing and speaking and more accu-K-12 academic careers, As students learn more about the patterns of English grammar in different communicative contexts throughout their they can develop more complex understandings of English grammar and usage. Students can

Progressive Language Skills in the Standards

need to be retaught and relearned as students advance through the grades. Beginning in grade 3, the Standards note such "progressive" skills and understandings with an asterisk (*) in the main document; they are also summarized in the table on pages 29 and 55 of that document as well as on page 34 of this appendix. These skills and understandapply these skills and understandings in more advanced ways. dards. In subsequent grades, as their writing and speaking become more sophisticated, students will need to learn to ings should be mastered at a basic level no later than the end of the grade in which they are introduced in the Stan-While all of the Standards are cumulative, certain Language skills and understandings are more likely than others to

a precise hierarchy of increasing difficulty in subject-verb agreement. development of sophistication and not meant to be exhaustive, to set firm grade-specific expectations, or to establish taken verbatim from the annotated writing samples found in Appendix C. The example is illustrative only of a general The following example shows how one such task—ensuring subject-verb agreement, formally introduced in the Stan-dards in grade 3—can become more challenging as students' writing matures. The sentences in the table below are



Example	Condition
Horses are so beautiful and fun to ride.	Subject and verb next to each other
[Horses, grade 3]	
When I started out the door, I noticed that Tigger and Max were follow- ing me to school.	Compound subject joined by and
[Glowing Shoes, grade 4]	
A mother or female horse is called a mare.	Compound subject joined by or, each
[Horses, grade 3]	subject takes a singular verb
The first thing to do is research, research, research!	Intervening phrase between subject and
[Zoo Field Trip, grade 4]	verb
If the watershed for the pools is changed, the condition of the pools changes.	Intervening phrase between each subject and verb suggesting a different number
[A Geographical Report, grade 7]	for the verb than the subject calls for
Another was the way to the other evil places.	Indefinite pronoun as subject, with
[Getting Shot and Living Through It, grade 5]	increasing distance between subject and verb
All his stories are the same type.	
[Author Response: Roald Dahl, grade 5]	
All the characters that Roald Dahl ever made were probably fake charac- ters.	
[Author Response: Roald Dahl, grade 5]	
One of the reasons why my cat Gus is the best pet is because he is a cuddle bug.	
[A Pet Story About My Cat Gus, grade 6]	

The following standards, marked with an asterisk (*) in the main Standards document, are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking.

				Grade(s)	de(s)			
standard	ы	4	л	ი	7	8	9-10	11-12
L.3.1f. Ensure subject-verb and pronoun- antecedent agreement.								
L.3.3a. Choose words and phrases for effect.								
L.4.1f. Produce complete sentences, recognizing and correcting inappropriate fragments and runons.								
L.4.1g. Correctly use frequently confused words (e.g., <i>to/too/two; there/their</i>).								
L.4.3a. Choose words and phrases to convey ideas precisely.								
L.4.3b. Choose punctuation for effect.								
L.5.1d. Recognize and correct inappropriate shifts in verb tense.								
L.5.2a. Use punctuation to separate items in a series. ¹								
L.6.1c. Recognize and correct inappropriate shifts in pronoun number and person.								
L.6.1d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).								
L.G.1e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.								
L.6.2a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.								
L.G.3a. Vary sentence patterns for meaning, reader/listener interest, and style. [†]								
L.6.3b. Maintain consistency in style and tone.								
L.7.1c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.								
L.7.3a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.								
L.8.1d. Recognize and correct inappropriate shifts in verb voice and mood.								
L.9-10.1a. Use parallel structure.								

[•] Subsumed by L.7.3a [•] Subsumed by L.9-10.1a [•] Subsumed by L.11-12.3a

Acquiring Vocabulary

they afford. Words are not just words. They are the nexus—the interface—between communication and thought. When we read, it is through words that we build, refine, and modify our knowledge. What makes vocabulary valuable and important is not the words themselves so much as the understandings

Marilyn Jager Adams (2009, p. 180)

Scott neither frequent nor systematic in most schools (Biemiller, 2001; Durkin, 1978; Lesaux, Kieffer, Faller, & Kelley, 2010; achievement (Baumann & Kameenui, 1991; Becker, 1977; Stanovich, 1986) but that vocabulary instruction has been cepted among researchers that the difference in students' vocabulary levels is a key factor in disparities in academic The importance of students acquiring a rich and varied vocabulary cannot be overstated. Vocabulary has been em-pirically connected to reading comprehension since at least 1925 (Whipple, 1925) and had its importance to comprehension confirmed in recent years (National Institute of Child Health and Human Development, & Nagy, 1997). 2000). It is widely ac

the word they are learning. In this way, students learn not only what a word means but also how to use that word in a variety of contexts, and they can apply appropriate senses of the word's meaning in order to understand the word in different contexts (Landauer & Dumais, 1997; Landauer, McNamara, Dennis, & Kintsch, 2007; Nagy, Herman, & Anderson, 1985). connections between a new word and their own experiences, they develop a nuanced and flexible understanding of tal, repeated exposure in a variety of contexts to the words they are trying to learn. When students make multiple Research suggests that if students are going to grasp and retain words and comprehend text, they need incremen-

aid in vocabulary acquisition: in discussions, a small set of words (accompanied by gesture and intonation) is used with great frequency to talk about a narrow range of situations children are exposed to on a day-to-day basis. Yet as & Ahrens, 1988). acquisition eventually stagnates by grade 4 or 5 unless students acquire additional words from written context (Hayes children reach school age, new words are introduced less frequently in conversation, and consequently vocabulary Initially, children readily learn words from oral conversation because such conversations are context rich in ways that

student's vocabulary is the smaller the gain (Daneman & Green, 1986; Hayes & Ahrens, 1988; Herman, Anderson, Pearson, & Nagy, 1987; Sternberg & Powell, 1983). Yet research shows that if students are truly to understand what they read, they must grasp upward of 95 percent of the words (Betts, 1946; Carver, 1994; Hu & Nation, 2000; Laufer, 1988). tively easy, which means that purposeful and ongoing concentration on vocabulary is needed (Hayes & Ahrens, 1988) Written language contains literally thousands of words more than are typically used in conversational language. Yet writing lacks the interactivity and nonverbal context that make acquiring vocabulary through oral conversation rela-In fact, at most between 5 and 15 percent of new words encountered upon first reading are retained, and the weaker a

the text) representation of the word must be sufficiently complete and well articulated to allow the intended meaning to be known to him or her; second, the reader must understand the context well enough to select the intended meaning from the realm of the word's possible meanings (which in turn depends on understanding the surrounding words c moment. Therefore, for a reader to grasp the meaning of a word, two things must happen: first, the reader's internal trum of a word's history, meanings, usages, and features that matters but only those aspects that are relevant at that The challenge in reaching what we might call "lexical dexterity" is that, in any given instance, it is not the entire spec ç

speaking (Miller, 1999; Nagy, Anderson, & Herman, 1987). new words and concepts (Beck, McKeown, & Kucan, 2008). Although direct study of language is essential to student such that syntax, morphology, and etymology can become useful cues in building meaning as students encounter awareness of word parts, word origins, and word relationships, provides students with a sense of how language works portunities to use and respond to the words they learn through playful informal talk, discussion, reading or being read to, and responding to what is read. Students benefit from instruction about the connections and patterns in language. Developing in students an analytical attitude toward the logic and sentence structure of their texts, alongside an Key to students' vocabulary development is building rich and flexible word knowledge. Students need plentiful op progress, most word learning occurs indirectly and unconsciously through normal reading, writing, listening, and

hend and produce language derstandings of word meanings, build awareness of the workings of language, and apply their knowledge to compre As students are exposed to and interact with language throughout their school careers, they are able to acquire un-

Three Tiers of Words

that words in each category present. They describe three levels, or tiers, of words in terms of the words' commonality (more to less frequently occurring) and applicability (broader to narrower). izing categories of words readers encounter in texts and for understanding the instructional and learning challenges Isabel L Beck, Margaret G. McKeown, and Linda Kucan (2002, 2008) have outlined a useful model for conceptual-

ing tier one words. While the term *tier* may connote a hierarchy, a ranking of words from least to most important, the reality is that all three tiers of words are vital to comprehension and vocabulary development, although learning tier two and three words typically requires more deliberate effort (at least for students whose first language is English) than does learn-

- Tier One words are the words of everyday speech usually learned in the early grades, albeit not at the same rate by all children. They are not considered a challenge to the average native speaker, though English language learners of any age will have to attend carefully to them. While Tier One words are important, they are not the focus of this discussion.
- Tier Two words (what the Standards refer to as *general academic* words) are far more likely to appear in written texts than in speech. They appear in all sorts of texts: informational texts (words such as *relative, vary, formulate* are highly generalizable thingsspecificity, and accumulate), technical texts (calibrate, itemize, periphery), and literary texts (misfortune, dignified, faltered, unabashedly). *-saunter* instead of *walk*, for example. Because Tier Two words are found across many types of texts, Tier Two words often represent subtle or precise ways to say relatively simple formulate , they
- Tier Three words (what the Standards refer to as *domain-specific* words) are specific to a domain or field of study (*Java*, *carburetor*, *legislature*, *circumference*, *aorta*) and key to understanding a new concept within a text. Because of their specificity and close ties to content knowledge, Tier Three words are far more common in informational texts than in literature. Recognized as new and "hard" words for most readers (particularly scaffolded (e.g., made a part of a glossary). student readers), they are often explicitly defined by the author of a text, repeatedly used, and otherwise heavily

Tier Two Words and Access to Complex Texts

Because Tier Three words are obviously unfamiliar to most students, contain the ideas necessary to a new topic, and are recognized as both important and specific to the subject area in which they are instructing students, teachers often define Tier Three words prior to students encountering them in a text and then reinforce their acquisition through likely to be defined explicitly within a text than are Tier Three words. Yet Tier Two words are frequently encountered in complex written texts and are particularly powerful because of their wide applicability to many sorts of reading. Teachers thus need to be alert to the presence of Tier Two words and determine which ones need careful attention. particular discipline and as a result are not the clear responsibility of a particular content area teacher. What is more, out a lesson. Unfortunately, this is not typically the case with Tier Two words, which by definition are not unique to a many Tier Two words are far less well defined by contextual clues in the texts in which they appear and are far less

Tier Three Words and Content Learning

student over several days or weeks. in which subject matters are integrated and coordinated across the curriculum and domains become familiar to the become familiar with the domain of the discourse and encounter the word in different contexts (Landauer & This normal process of word acquisition occurs up to four times faster for Tier Three words when students have 1997). Hence, vocabulary development for these words occurs most effectively through a coherent course of study Dumais

Examples of Tier Two and Tier Three Words in Context

The following annotated samples call attention to Tier Two and Tier Three words in particular texts and, by singling them out, foreground the importance of these words to the meaning of the texts in which they appear. Both samples appear without annotations in Appendix B.

Example 1: Volcanoes (Grades 4-5 Text Complexity Band

Excerpt

In early times, no one knew how volcances formed or why they spouted red-hot molten rock. In modern times, scientists began to study volcances. They still don't know all the answers, but the know much about how a volcano works they



called a volcanic eruption. When magma pours forth Volcanoes are formed when magma pushes its way up through the crack in Earth's crust. This on the surface, it is called lava <u>.</u>.

Simon, Seymour. Volcanoes. New York: HarperCollins, 2006. (2006)

is needed to visualize the action of a volcano. The same could be said of the word surface. Both layers and surface are likely to reappear in middle and high school academic texts in both literal and figurative contexts ("this would seem plausible on the surface", "this story has layers of meaning"), which would justify more intensive instruction in them in grades 4-5. most. crust") and to grasp the notion of the planet being composed of layers, of which the crust and the mantle are upperof the word layers is necessary both to visualize the structure of the crust ("the top layers of solid rock are called the Of the Tier Two words, among the most important to the overall meaning of the excerpt is layers. An understanding Perhaps equally important are the word spouted and the phrase pours forth; an understanding of each of these

 \lor olcano(es) appears four times—five if volcanic is counted. As is also typical with Tier Three words, the text provides the reader with generous support in determining meaning, including explicit definitions (e.g., "the melted, or molten, rock is called magma") and repetition and overlapping sentences (e.g., . . . called the crust. Deep beneath the crust . Tier Three words often repeat; in this excerpt, all of the Tier Three words except mantle and lava appear at least twice

Example 2: Freedom Walkers (Grades 6-8 Text Complexity Band)

Excerpt

From the Introduction: "Why They Walked"

if there were empty seats up front. ۵ Not so long ago in Montgomery, Alabama, the color of your skin determined where you could sit or public bus. If you happened to be an African American, you had to sit in the back of the bus, even

Back then, racial segregation was the rule throughout the American South. Strict laws—called "Jim Crow" laws—enforced a system of white supremacy that discriminated against blacks and kept them in their place as second-class citizens.

same water fountains, or sit together in the same movie theaters worship in the same churches, eat in the same restaurants, sleep in the same hotels, drink from the day they were buried in segregated cemeteries. Blacks and whites did not attend the same schools, People were separated by race from the moment they were born in segregated hospitals until the

property or ride together in a taxi. In Montgomery, it was against the law for a white person and a Negro to play checkers on public

ances in the voting booth, which for the most part, was closed to them. But there were other ways to protest, and one day a half century ago, the black citizens in Montgomery rose up in protest and even physical violence. As a result, African Americans in the South could not express their grievspecial tax that was required of all voters but was too costly for many blacks and for poor whites as well. Voters also had to pass a **literacy** test to prove that they could read, write, and understand the united to demand their who overcame the obstacles and insisted on registering as voters faced threats, harassment and U.S. Constitution. These tests were often rigged to disqualify even highly educated blacks. Those Most southern blacks were denied their right to vote. The biggest obstacle was the poll tax, rights—by walking peacefully

It all started on a bus.

Freedman, Russell. Freedom Walkers: The Story of the Montgomery Bus Boycott New York: Holiday House, 2006. (2006)

study is further merited by the fact that it has multiple meanings, is likely to appear in future literary and informationa the causal agent for all that follows. The centrality of determined to the topic merits the word intensive attention. Its the text. The power of determined here lies in the notion that skin color in Montgomery, Alabama, at that time was The first Tier Two word encountered in the excerpt, determined, is essential to understanding the overall meaning texts, and is part of a family of related words (determine, determination, determined terminate terminal) q







Glossary of Key Terms

document; the names of various sections (e.g., "Reading") refer to parts of this appendix. field for clarification. The terms defined below are limited to those words and phrases particularly important to the Standards and that have a meaning unique to this document. CCSS refers to the main Common Core State Standards Every effort has been made to ensure that the phrasing of the Standards is as clear and free of jargon as possible. When used, specialized and discipline-specific terms (e.g., *simile, stanza, declarative sentence*) typically conform to their standard definition, and readers are advised to consult high-quality dictionaries or standard resources in the

pages Definitions of many important terms associated with reading foundational skills appear in Reading Foundational Skills rative) can be found in Writing, pages 23-24. 17-22. Descriptions of the Standards' three writing types (argument, informative/explanatory writing, and nar-

guage, p. 33) Domain-specific words and phrases - Vocabulary specific to a particular field of study (domain), such as the human body (CCSS, p. 33); in the Standards, *domain-specific words and phrases* are analogous to Tier Three words (Lan-

Editing - A part of writing and preparing presentations concerned chiefly with improving the clarity, organization, concision, and correctness of expression relative to task, purpose, and audience; compared to *revising*, a smaller-scale activity often associated with surface aspects of a text; see also *revising*, *rewriting*

also include rebuses to represent words that cannot yet be decoded or recognized; see also rebus Emergent reader texts - Texts consisting of short sentences comprised of learned sight words and CVC words; may

or an analysis and that can be evaluated by others; should appear in a form and be derived from a source widely cepted as appropriate to a particular discipline, as in details or quotations from a text in the study of literature an experimental results in the study of science Evidence - Facts, figures, details, quotations, or other sources of data and information that provide support for claims and ac-

ly precise to allow a student to achieve adequate specificity and depth within the time and format constraints Focused question - A query narrowly tailored to task, purpose, and audience, as in a research query that is sufficient.

Formal English - See standard English

the General academic words and phrases - Vocabulary common to written texts but not commonly a part of speech; in Standards, general academic words and phrases are analogous to Tier Two words and phrases (Language, p. 33)

dards, often paired with *proficient(ly*) to suggest a successful student performance done without *scaffolding*; in Reading standards, the act of reading a text without scaffolding, as in an assessment; see also *proficient(ly*), *sca* Independent(ly) - A student performance done without scaffolding from a teacher, other adult, or peer; in the Stanscaffold the

sources over an extended period of time, as in a few weeks of instructional time More sustained research project - An investigation intended to address a relatively expansive query using several

the Point of view - Chiefly in literary texts, the narrative point of view (as in first- or third-person narration); more broadly position or perspective conveyed or represented by an author, narrator, speaker, or character

to be applied to electronic as well as traditional texts; the Standards are generally assumed to apply to both Print or digital (texts, sources) - Sometimes added for emphasis to stress that a given standard is particularly likely

independent(ly), scaffolding Proficient(ly) - A student performance that meets the criterion established in the Standards as measured by mance done without scaffolding; in the Reading standards, the act of reading a text with comprehension; see also teacher or assessment; in the Standards, often paired with *independent(ly*) to suggest a successful student perfor-۵

Rebus - A mode of expressing words and phrases by using pictures of objects whose names resemble those words

ated with the overall content and structure of a text; see also editing, rewriting the content of a text relative to task, purpose, and audience; compared to editing, Revising - A part of writing and preparing presentations concerned chiefly with a reconsideration and reworking a larger-scale activity often associç

Rewriting - A part of writing and preparing presentations that involves largely or wholly replacing a previous, unsatis-factory effort with a new effort, better aligned to task, purpose, and audience, on the same or a similar topic or theme; compared to *revising*, a larger-scale activity more akin to replacement than refinement; see also *editing*, *revising*

Scaffolding - Temporary guidance or assistance provided to a student by a teacher, another adult, or a more capable peer, enabling the student to perform a task he or she otherwise would not be able to do alone, with the goal of fostering the student's capacity to perform the task on his or her own later on

a few class periods or a week of instructional time Short research project - An investigation intended to address a narrowly tailored query in a brief period of time, as in

Source - A text used largely for informational purposes, as in research.

Standard English – In the Standards, the most widely accepted and understood form of expression in English in the United States; used in the Standards to refer to formal English writing and speaking; the particular focus of Language standards 1 and 2 (CCSS, pp. 26, 28, 52, 54)

workforce-related subject; a technical aspect of a wider field of study, such as art or music Technical subjects - A course devoted to a practical study, such as engineering, technology, design, business, or other

and task variables; in the Standards, a three-part assessment of text difficulty that pairs qualitative and quantitative measures with reader-task considerations (CCSS, pp. 31, 57; Reading, pp. 4-16) Text complexity -The inherent difficulty of reading and comprehending a text combined with consideration of reader

Text complexity band - A range of text difficulty corresponding to grade spans within the Standards; specifically, the spans from grades 2-3, grades 4-5, grades 6-8, grades 9-10, and grades 11-CCR (college and career readiness)

Textual evidence - See evidence

With prompting and support/with (some) guidance and support - See scaffolding

[•] Though Vygotsky himself does not use the term *scaffolding*, the educational meaning of the term relates closely to his concept of the zone of proximal development. See L. S. Vygotsky (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

SECTION 4

Wisconsin Research and Resources



Guiding Principles for Teaching and Learning: Research, Probing Questions, Resources, and References

I. Every student has the right to learn.

It is our collective responsibility as an education community to make certain each child receives a high-quality, challenging education designed to maximize potential; an education that reflects and stretches his or her abilities and interests. This belief in the right of every child to learn forms the basis of equitable teaching and learning. The five principles that follow cannot exist without this commitment guiding our work.

2. Instruction must be rigorous and relevant.

To understand the world in which we live, there are certain things we all must learn. Each school subject is made up of a core of essential knowledge that is deep, rich, and vital. Every student, regardless of age or ability, must be taught this essential knowledge. What students learn is fundamentally connected to how they learn, and successful instruction blends the content of a discipline with processes of an engaging learning environment that changes to meet the dynamic needs of all students.

3. Purposeful assessment drives instruction and affects learning.

Assessment is an integral part of teaching and learning. Purposeful assessment practices help teachers and students understand where they have been, where they are, and where they might go next. No one assessment can provide sufficient information to plan teaching and learning. Using different types of assessments as part of instruction results in useful information about student understanding and progress. Educators should use this information to guide their own practice and in partnership with students and their families to reflect on learning and set future goals.

4. Learning is a collaborative responsibility.

Teaching and learning are both collaborative processes. Collaboration benefits teaching and learning when it occurs on several levels: when students, teachers, family members, and the community collectively prioritize education and engage in activities that support local schools, educators, and students; when educators collaborate with their colleagues to support innovative classroom practices and set high expectations for themselves and their students; and when students are given opportunities to work together toward academic goals in ways that enhance learning.

5. Students bring strengths and experiences to learning.

Every student learns. Although no two students come to school with the same culture, learning strengths, background knowledge, or experiences, and no two students learn in exactly the same way, every student's unique personal history enriches classrooms, schools, and the community. This diversity is our greatest education asset.

6. Responsive environments engage learners.

Meaningful learning happens in environments where creativity, awareness, inquiry, and critical thinking are part of instruction. Responsive learning environments adapt to the individual needs of each student and encourage learning by promoting collaboration rather than isolation of learners. Learning environments, whether classrooms, schools, or other systems, should be structured to promote engaged teaching and learning.



Guiding Principle 1: Every student has the right to learn.

It is our collective responsibility as an education community to make certain each child receives a high-quality, challenging education designed to maximize potential, an education that reflects and stretches his or her abilities and interests. This belief in the right of every child to learn forms the basis of equitable teaching and learning. The five principles that follow cannot exist without this commitment guiding our work.

Every student's right to learn provides the overarching vision for Wisconsin's Guiding Principles for education. To be successful, education must be committed to serving the learning needs of students from various social, economic, cultural, linguistic, and developmental backgrounds. For all students to have a guaranteed right to learn, schooling must be equitable.

Research Summary

Focusing on Equity

The belief that each student has the right to learn despite differences in educational needs and backgrounds has important implications for ensuring an equitable education for all students. In the education research literature, the term educational equality refers to the notion that all students should have access to an education of similar quality-the proxy for which is frequently educational *inputs* such as funding, facilities, resources, and quality teaching and learning. In contrast, the term educational equity connotes the requirement that all students receive an education that allows them to achieve at a standard level or attain standard educational outcomes (Brighouse & Swift, 2008). Importantly, equality in terms of educational resources or inputs may not guarantee equity in educational outcomes because not all students reach the same level of achievement with the same access to resources (Brighouse & Swift, 2008). To serve students of varying economic, social, developmental, or linguistic backgrounds, achieving equity in education may require more resources to meet the greater educational needs of certain students (Berne & Stiefel, 1994).

The research literature offers several components that provide a framework for understanding what an equitable education for all students looks like at the classroom level. These components include a call for all students to be provided with the following:

- Access to resources and facilities
- · Instruction in all areas tailored to their needs
- Curriculum that is rigorous and relevant
- · Educators who are culturally sensitive and respectful
- Interactions with staff and other students that are positive and encouraging in an atmosphere of learning
- Assessment that is varied to give each student the opportunity to demonstrate learning (Education Northwest, 2011)

Access

Access to resources and facilities largely refers to various legal mandates that all children have the right to attend school and participate in all school activities. Since the landmark ruling *Brown v. Board of Education of Topeka* (1954), court decisions and federal regulations have mandated equality of access to all educational opportunities for students regardless of race, ethnicity, or gender

(Civil Rights Act, 1964), disability (Education for All Handicapped Children Act, 1975), or language (*Lau v. Nichols, 1974*). Equity in the provision of educational resources and funding was improved with the passage of Title I of the Elementary and Secondary Education Act (ESEA; 1965), which provided additional resources for economically disadvantaged students to meet their learning needs. Since Title I, research on equity in education has grown, and with the reauthorization of ESEA in the No Child Left Behind Act in 2001, equity in educational outcomes for all students was emphasized in the law. Access to an equitable education is a legal right for all children, and the quality of that access in classroom instruction is a moral and ethical right.



Instruction

Instruction that is tailored to meet all students' needs goes beyond simply providing equal access to education. High-quality instruction has increasingly been defined in the literature as a key factor in student achievement. High-quality instruction includes differentiated instructional strategies, teaching to students' learning styles, and provision of instructional support for students who are educationally, socially, or linguistically challenged. Differentiated instruction involves utilizing unique instructional strategies for meeting individual student needs as well as modifying curriculum for both high- and low-performing students. Assessing and teaching to student learning styles is one form of differentiation. Research has shown the value of adapting instructional strategies to different student learning styles (Gardner, 1999) and supports the practice of classroom differentiation (Mulroy & Eddinger, 2003; Tomlinson, 2005).

Curriculum

Designing curriculum that is rigorous and relevant provides an important foundation for a high-quality learning environment by helping make standards-based content accessible to all students. A relevant. rigorous curriculum has been found to be important for all students. Although advanced and rigorous curriculum is generally viewed to be an important factor of academic success for high-achieving students, research also indicates that using challenging, interesting, and varied curriculum for students of all achievement levels improves student achievement (Daggett, 2005). Rigorous curriculum can be adapted for low-performing students in a way that challenges them and helps them meet learning standards. For example, the universal design for learning (UDL) offers strategies for making the general curriculum accessible to special education students (Rose, Hasselbring, Stahl, & Zabala, 2009). Similarly, research on lesson scaffolding emphasizes strategies for providing a rigorous content curriculum to student who are culturally or linguistically diverse or who need additional context to understand certain concepts (Gibbons, 2002).

Climate

Interactions with staff and students that are positive and focused on learning are part of an emotionally safe school climate, but the literature also supports the need for a climate of high academic expectations (Haycock, 2001). Schools with large numbers of high-poverty and racially diverse students have shown significant academic growth when teachers and staff members create an environment of high expectations for achievement (Reeves, 2010). In addition, research on school climate has asserted the need for students to feel emotionally safe and respected as well as physically safe in school (Gronna & Chin-Chance, 1999).

A positive, respectful learning environment with high expectations and curricular and instructional supports for all students offers an avenue to genuine educational equity.

Probing Questions

- What are some of the needs and challenges your school faces in moving toward a fully equitable education for all students?
- How could you provide leadership in your school to work to ensure an equitable education for all students?



Resources

A variety of resources are available for teachers and leaders on educational equity for all students. A few websites and links are highlighted below:

The School Improvement Center developed activities to help districts develop an equity framework. These resources can be found at Actualizing Equity: The Equity Framework: http://www.gapsc.com/EducatorPreparation/NoChildLeftBehind/Admin/Files/conference_032010/Actualizing_Equity.pdf.

The Education Equality Project developed a website with useful resources for educators. It can be found at http://www.edequality.org.

The Equity Center has a website with a variety of resources. The resources can be found at http://educationnorthwest.org/project/ Equity%20Program/resource/.

The Midwest Equity Assistance Center has a website with many resources. It can be found at http://www.meac.org/Publications.html.

The Office for Civil Rights has a useful website for educators. It can be found at http://www2.ed.gov/about/offices/list/ocr/index.html.

Southern Poverty Law Center, Teaching Tolerance Program. Resources can be found at http://www.splcenter.org/what-we-do/teaching-tolerance.

References

Berne, R., & Stiefel, L. (1994). Measuring educational equity at the school level: The finance perspective. *Educational Evaluation and Policy Analysis*, 16(4), 405–421.

Brighouse, H., & Swift, A. (2008). Putting educational equality in its place. *Education, Finance and Policy*, 3(4), 444–446.

Brown v. Board of Education of Topeka, 347 U.S. 483 (1954).

Civil Rights Act, Title IX, Pub. L. No. 88-352, 78 Stat. 241 (1964).

Daggett, W. R. (2005). Achieving academic excellence through rigor and relevance [White paper]. Rexford, NY: International Center for Leadership in Education. Retrieved June 3, 2011, from http://www. leadered.com/pdf/Academic_Excellence.pdf Education Northwest. (2011). Key components of educational equity [Website]. Retrieved June 3, 2011, from http://educationnorthwest.org/ equity-program/educational

Education for All Handicapped Children Act, Pub. L. No. 94-142 (1975).

Elementary and Secondary Education Act of 1965, Pub. L. No. 89-10) (1965).

Gardner, H. (1999). Intelligence reframed: Multiple intelligences for the 21st century. New York: Basic Books.

Gibbons, P. (2002). Scaffolding language, scaffolding learning: Teaching second language learners in the mainstream classroom. Westport, CT: Heinemann.

Gronna, S. S., & Chin-Chance, S.A. (1999, April). Effects of school safety and school characteristics on grade 8 achievement. Paper presented at the American Educational Research Association, Montreal, Quebec, Canada. (ERIC Document Reproduction Service No. 430292). Retrieved June 3, 2011, from http://www.eric.ed.gov/PDFS/ED430292.pdf

Haycock, K. (2001). Closing the achievement gap. *Educational Leadership*, 58(6), 6–11.

Lau v. Nichols, 414 U.S. 565 (1974).

Mulroy, H., & Eddinger, K. (2003, March). *Differentiation and literacy*. Paper presented at the Institute on Inclusive Education, Rochester, NY.

No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002). Retrieved June 3, 2011, from http://www.ed.gov/policy/elsec/leg/esea02/107-110.pdf

Reeves, D. B. (2010). The 90/90/90 schools: A case study. In D. B. Reeves, *Accountability in action* (2nd ed., 185–196). Denver, CO: Advanced Learning Press.

Rose, D., Hasselbring, T., Stahl, S., & Zabala, J. (2009). Assistive technology, NIMAS, and UDL: From some students to all students. In D. Gordon, J. Gravel, & L. Schifter (Eds.), *A policy reader in universal design for learning* (pp. 133–154). Cambridge, MA: Harvard Education Press.

Tomlinson, C.A. (2005). Grading and differentiation: Paradox or good practice? *Theory Into Practice*, 44(3) 262–269.



Guiding Principle 2: Instruction must be rigorous and relevant.

To understand the world in which we live, there are certain things we all must learn. Each school subject is made up of a core of essential knowledge that is deep, rich, and vital. Every student, regardless of age or ability, must be taught this essential knowledge. What students learn is fundamentally connected to how they learn, and successful instruction blends the content of a discipline with processes of an engaging learning environment that changes to meet the dynamic needs of all students.

Research Summary

Instruction should connect directly to students' lives and must deeply engage them with the content in order for students to be better prepared for college and careers. To succeed in postsecondary education and in a 21st century economy, students must be afforded opportunities to practice higher-order thinking skills, such as how to analyze an argument, weigh evidence, recognize bias (their own and others' bias), distinguish fact from opinion, balance competing principles, work collaboratively with others, and be able to communicate clearly what they understand (Wagner, 2006). In order to accomplish these goals, instruction must be rigorous and meaningful.

The definition of *rigor* varies greatly in both research and practice. Bower and Powers (2009) conducted a study to determine the essential components of rigor. They defined *rigor* through their research as "how the standard curriculum is delivered within the classroom to ensure students are not only successful on standardized assessments but also able to apply this knowledge to new situations both within the classroom and in the real world." They also identified higher-order thinking and real-world application as two critical aspects of rigor, suggesting that it is not enough for students to know how to memorize information and perform on multiple-choice and short-answer tests. Students must have deep and rich content knowledge, but rigor also includes the ability to apply that knowledge in authentic ways.

Teaching and learning approaches that involve students collaborating on projects that culminate with a product or presentation are a way to bring rigor into the classroom. Students can take on real problems, use what they know and research to come up with real solutions to real problems. They must engage with their subject and with their peers. In August 2010, the Institutes of Education Sciences reported the results of a randomized control trial showing that a problem-based curriculum boosted high school students' knowledge of economics. This research suggests that students using this learning system and its variants score similarly on standardized tests as students who follow more traditional classroom practices. The research also suggests that students learning through problem-solving and projects are more adept at applying what they know and are more deeply engaged.

The notion of a meaningful curriculum is not a new one. John Dewey (1990), writing in 1902, called for a curriculum that involves a critical but balanced understanding of the culture and the prior knowledge of each child in order to extend learning. According to Spillane (2000), presenting content in more authentic ways-disciplinary and other real-world contexts—has become a central theme of current reform movements. Schools should be places where "the work students are asked to do [is] work worth doing" (Darling-Hammond, 2006, p. 21). Research collected by the International Center for Leadership in Education shows that "students understand and retain knowledge best when they have applied it in a practical, relevant setting" (Daggett, 2005, p. 2). A skilled 21st century educator helps students master learning targets and standards using purposefully crafted lessons and teaches with appropriate instructional strategies incorporated. The students understand why they are learning particular skills and content and are engaged in learning opportunities that allow them to use their inquiry skills, creativity, and critical thinking to solve problems.

According to Brown, Collins, and Duguid (1989), instruction connected to individual contexts has been found to have a significant impact on learning. Research conducted by Sanbonmatsu, Shavitt, and Sherman (1991) and Petty and Cacioppo (1984) also contends that student learning is directly influenced by how well it is connected to a context. Much of this research began with the analysis of how people learn when they find the ideas significant to their own world. It begins to show the importance of connecting content and instruction to the world of the students. Weaver and Cottrell (1988) point out that how content is presented can affect how students retain it. They state instruction that connects the content to the students' lives and experiences helps students to internalize meaning. Sass (1989) and Keller (1987) suggest



that if teachers can make the content familiar to the students and link it to what they are familiar with, students' learning will increase. Shulman and Luechauer (1993) contend that these connections must be done by engaging students with rigorous content in interactive learning environments.

Higher-Order Thinking

Higher-order thinking, according to Newmann (1990), "challenges the student to interpret, analyze, or manipulate information" (p. 45). This definition suggests that instruction must be designed to engage students through multiple levels in order for them to gain a better understanding of the content. An analysis of the research by Lewis and Smith (1993) led to their definition of *higher-order thinking*: "when a person takes new information and information stored in memory and interrelates and/ or rearranges and extends this information to achieve a purpose or find possible answers in perplexing situations" (p. 44). This definition emphasizes the level of complexity necessary to help students reach a deeper and higher level of understanding of the content. Shulman (1987) points out teachers will need an in-depth knowledge of their content to be able to fit these types of strategies to their instruction.

Real-World Application

VanOers and Wardekker (1999) indicate that connecting instruction to real-world applications gives meaning to learning, makes it practical, and can help to develop connections with the greater community. Incorporating real-world examples becomes more authentic to students because they will be able to connect the learning to the bigger picture rather than just the classroom. Newmann and Wehlage (1993) describe the three criteria developed by Archbald and Newmann (1988) for this type of authentic learning: "Students construct meaning and produce knowledge, students use disciplined inquiry to construct meaning, and students aim their work toward production of discourse, products, and performances that have value or meaning beyond success in school" (p. 8) These criteria, when reflected upon by teachers, can be a useful tool to ensure that instruction is authentic and engaging for all students.

Authentic Learning

Authentic learning builds on the concept of "learning by doing" to increase a student's engagement. To succeed, this method needs to have meaning or value to the student, embody in-depth learning in the subject and allow the student to use what he or she learned to produce something new and innovative (Lemke & Coughlin, 2009). For example, in project-based learning, students collaborate to create their own projects that demonstrate their knowledge (Bell, 2010). Students start by developing a question that will guide their work. The teacher acts as the supervisor. The goal is greater understanding of the topic, deeper learning, higher-level reading, and increased motivation (Bell, 2010). Research has shown that students who engage in project-based learning outscore their traditionally educated peers in standardized testing (Bell, 2010).

Constructivist learning is also a way to bring authenticity to the classroom. Richard Mayer (2004) defines constructivist learning as an "active process in which learners are active sense makers who seek to build coherent and organized knowledge." Students co-construct their learning, with the teacher serving as a guide or facilitator (oftentimes using technology as a facilitating tool). The teacher doesn't function in a purely didactic manner. Neo and Neo (2009) state that constructivism helps students develop problem-solving skills, critical thinking and creative skills and apply them in meaningful ways. Inquiry-based instruction, a type of constructivist learning, has students identify real world problems and then pose and find answers to their own questions. A study by Minner, Levy and Century (2010) has shown this method can improve student performance. They found inquiry-based instruction has a larger impact (approximately 25-30% higher) on a student's initial understanding and retention of content than any other variable.

Another form of authentic learning involves video simulated learning or gaming. Research has shown that video games can provide a rich learning context by fostering creative thinking. The games can show players how to manage complex problems and how their decisions can affect the outcome (Sharritt, 2008). This form of learning also can engage students in collaboration and interaction with peers.

Multimodal Instruction

Multimodal teaching leverages various presentation formats—such as printed material, videos, PowerPoints, and computers—to appeal to different learning styles (Birch, 2009; Moreno & Mayer, 2007). It accommodates a more diverse curriculum and can provide a more engaging and interactive learning environment (Birch, 2009). According to research, an effective way of learning is by utilizing different modalities within the classroom, which can help students understand difficult concepts—therefore improving how they learn (Moreno & Mayer, 2007).



An example of multimodal learning that incorporates technology is digital storytelling. Digital storytelling is the practice of telling stories by using technology tools (e.g., digital cameras, authoring tools, computers) to create multimedia stories (Sadik, 2008). Researchers have found that using this form of learning facilitates student engagement, deep learning, project-based learning, and effective integration of technology into instruction (Sadik, 2008).

Probing Questions

- Research emphasizes the need for higher-order thinking embedded in instructional practice. How might you learn to incorporate higher-order thinking strategies into your practice?
- The research also suggests the need to connect learning experiences to the real world of the students. How can you use real-world examples in your practice to better engage students in their learning?

Resources

The Rigor/Relevance Framework created by Daggett (2005) is a useful tool to create units, lessons, and assessments that ask students to engage with content at a higher, deeper level. The model and examples are available on the following website: http://www.leadered.com/rrr.html.

Newmann's Authentic Intellectual Work Framework (Newmann, Secada & Wehlage, 1995) gives teachers the tools to analyze instructional practices and student work in regard to indicators of rigor. The research and tools are available at the Center for Authentic Intellectual Work website: http://centerforaiw.com/.

References

Archbald, D., & Newmann, F. M. (1988). Beyond standardized testing: Assessing authentic academic achievement in the secondary school. Reston, VA: National Association of Secondary School Principals.

Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House*, 83, 39–43.

Birch, D. (2009). PowerPoint with audio: A breeze to enhance the student learning experience. *E-Journal of Business Education* & Scholarship of *Teaching*, 3(1), 36–42.

Bower, H.A., & Powers, J. D. (2009, Fall). What is rigor? A qualitative analysis of one school's definition. *Academic Leadership Live:The Online Journal*, 7(4). Retrieved June 3, 2011, from http://www.academicleadership. org/article/What_is_Rigor_A_Qualitative_Analysis_of_One_School_s_ Definition

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42.

Daggett, W. R. (2005). Achieving academic excellence through rigor and relevance. Rexford, NY: International Center for Leadership in Education.

Darling-Hammond, L. (2006). Securing the right to learn: Policy and practice for powerful teaching and learning. *Educational Researcher*, 35(7), 13–24.

Dewey, J. (1990). School and society [and] The child and the curriculum. Chicago: University of Chicago Press.

Finkelstein, Neal, Thomas Hanson, Chun-Wei Huang, Becca Hirschman, and Min Huang. (2010). Effects of problem based economics on high school economics instruction." *Institute For Education Sciences*. West Ed.

Keller, J. M. (1987). Strategies for stimulating the motivation to learn. *Performance & Instruction*, 26(8), 1–7.

Lemke, C., & Coughlin, E. (2009, September). The change agents: Technology is empowering 21st century students in four key ways. *Educational Leadership*, 67(1), 54–59.

Lewis, A., & Smith, D. (1993). Defining higher order thinking. *Theory Into Practice*, 32(3), 131–137.

Mayer, R.E. (2004). Should There Be a Three-Strikes Rule Against Pure Discovery Learning? The Case for Guided Methods of Instruction. American Psychologist, 59(1), 14-19.



Minner, Daphne D., Abigail Jurist Levy, and Jeanne Century. "Inquiry-Based Science Instruction—What Is It and Does It Matter? Results from a Research Synthesis Years 1984 to 2002." *JOURNAL OF RESEARCH IN SCIENCE TEACHING* 47.4 (April 2010): 474-96.

Moreno, R., & Mayer, R. (2007). Interactive multimodal learning environments [Special issue on interactive learning environment-contemporary issues and trends]. Educational Psychology Review, 19, 309–326.

Neo, M. & Neo, T.K. (2009). Engaging students in multimedia-mediated Constructivist learning-Students' perceptions. Educational Technology & Society, 12(2), 254-266.

Newmann, F. M. (1990). Higher order thinking in teaching social studies: A rationale for the assessment of classroom thoughtfulness. *Journal of Curriculum Studies*, 22(2), 41–56.

Newmann, F. M., Secada, W. G., & Wehlage, G. G. (1995). A guide to authentic instruction and assessment: Vision, standards, and scoring. Madison, WI: Wisconsin Center for Education Research.

Newmann, F. M., & Wehlage, G. G. (1993, April). Five standards of authentic instruction. *Educational Leadership*, 50(7), 8–12.

Petty, R. E., & Cacioppo, J.T. (1984). The effects of involvement on responses to argument quality: Central and peripheral routes to persuasion. *Journal of Personality and Social Psychology*, 46(1), 69–81.

Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational Technology Research & Development*, 56, 487–506.

Sanbonmatsu, D. M., Shavitt, S., & Sherman, S. J. (1991). The role of personal relevance in the formation of distinctiveness-based illusory correlations. *Personality and Social Psychology Bulletin*, 17(2), 124–132.

Sass, E. J. (1989). Motivation in the college classroom: What students tell us. *Teaching of Psychology*, 16(2), 86–88.

Sharritt, M. J. (2008). Forms of learning in collaborative video game play. Research and Practice in Technology Enhanced Learning, 3(2), 97–138.

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1–22.

Shulman, G., & Luechauer, D. (1993). The empowering educator: A CQI approach to classroom leadership. In D. L. Hubbard (Ed.), *Continuous quality improvement: Making the transition to education* (pp. 424–453). Maryville, MO: Prescott.

Spillane, J. P. (2000). A fifth-grade teacher's reconstruction of mathematics and literacy teaching: Exploring interactions among identity, learning, and subject matter. *Elementary School Journal*, 100(4), 307–330.

VanOers, B., & Wardekker, K. (1999). On becoming an authentic learner: Semiotic activity in the early grades. *Journal of Curriculum Studies*, 31(2), 229–249.

Wagner, T. (2006, January 11). Rigor on trial [Commentary]. *Education* Week, 25(18), 28–29. Retrieved June 3, 2011, from http://www.edweek. org/ew/articles/2006/01/11/18wagner.h25.html?tkn=NXVFIUJgch3u9KNo YbF2gM%2BinCPa3hvbbWkj&print=1

Weaver, R. L., & Cottrell, H.W. (1988). Motivating students: Stimulating and sustaining student effort. *College Student Journal*, 22, 22–32.

Wentling, R. M., & Waight, C. L. (2001). Initiative that assist and barriers that hinder the successful transition of minority youth into the workplace in the USA. *Journal of Education and Work*, 14(1), 71–89.



Guiding Principle 3: Purposeful assessment drives instruction and affects learning.

Assessment is an integral part of teaching and learning. Purposeful assessment practices help teachers and students understand where they have been, where they are, and where they might go next. No one assessment can provide sufficient information to plan teaching and learning. Using different types of assessments as part of instruction results in useful information about student understanding and progress. Educators should use this information to guide their own practice and in partnership with students and their families to reflect on learning and set future goals.

Research Summary

Assessment informs teachers, administrators, parents, and other stakeholders about student achievement. It provides valuable information for designing instruction; acts as an evaluation for students, classrooms, and schools; and informs policy decisions. Instruments of assessment can provide formative or summative data, and they can use traditional or authentic designs. Research on assessment emphasizes that the difference between formative and summative assessment has to do with how the data from the assessment is used.

Dunn and Mulvenon (2009) define summative assessment as assessment "data for the purposes of assessing academic progress at the end of a specified time period (i.e., a unit of material or an entire school year) and for the purposes of establishing a student's academic standing relative to some established criterion" (p. 3).

The Council of Chief State School Officers (CCSSO) (2008) define formative assessment as a process "used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes" (p. 3).

Wisconsin's approach to balanced assessment www.dpi.wi.gov/oea/ balanced emphasizes the importance of identifying the purposes for administering an assessment. Identifying the purpose or data needed establishes whether a particular assessment is being used formatively or summatively. There can be multiple purposes for giving a particular assessment, but identifying how the data will be used helps to ensure that the assessment is collecting the data that is needed for educators, students and their families.

Assessments, whether formative or summative, can be designed as traditional or authentic tools. Traditional assessment uses tools such as paper and pencil tests, while authentic assessment focuses on evaluating student learning in a more "real life" situation. The bulk of the research on assessment design focuses on authentic assessment.

Formative Assessment

Using formative assessment as a regular part of instruction has been shown to improve student learning from early childhood to university education. It has been shown to increase learning for both lowperforming and high-performing students. Black and Wiliam's (1998) seminal study found that the use of formative assessment produces significant learning gains for low-achieving students. Other researchers have shown similar results for students with special learning needs (McCurdy & Shapiro, 1992; Fuchs & Fuchs, 1986). Research also supports the use of formative assessment in kindergarten classes (Bergan, Sladeczek, Schwarz, & Smith, 1991), and university students (Martinez & Martinez, 1992).

Formative assessment provides students with information on the gaps that exist between their current knowledge and the stated learning goals (Ramaprasad, 1983). By providing feedback on specific errors it helps students understand that their low performance can be improved and is not a result of lack of ability (Vispoel & Austin, 1995). Studies emphasize that formative assessment is most effective when teachers use it to provide specific and timely feedback on errors and suggestions for improvement (Wininger, 2005), when students understand the learning objectives and assessment criteria, and when students have the opportunity to reflect on their work (Ross, 2006; Ruiz-Primo & Furtak, 2006). Recent research supports the use of web-based formative assessment for improving student achievement (Wang, 2007).



A number of studies emphasize the importance of teacher professional development on formative assessment in order to gain maximum student achievement benefits (Atkins, Black & Coffey, 2001; Black & Wiliam, 1998). A 2009 article in *Educational Measurement* asserts that teachers are better at analyzing formative assessment data than at using it to design instruction. Research calls for more professional development on assessment for teachers (Heritage, Kim, Vendlinski, & Herman, 2009).

Authentic Assessment

Generating rich assessment data can be accomplished through the use of an authentic assessment design as well as through traditional tests. Authentic assessments require students to "use prior knowledge, recent learning, and relevant skills to solve realistic, complex problems" (DiMartino & Castaneda, 2007, p. 39). Research on authentic assessment often explores one particular form, such as portfolios (Berryman & Russell, 2001; Tierney et al., 1998); however, several studies examined more than one form of authentic assessment: portfolios, projectbased assessment, use of rubrics, teacher observation, and student demonstration (Darling-Hammond, Rustique-Forrester, & Pecheone, 2005; Herman, 1997; Wiggins, 1990). Authentic assessment tools can be used to collect both formative and summative data. These data can provide a more complete picture of student learning.

Balanced Assessment

Wisconsin's Next Generation Assessment Task Force (2009) defines the purpose and characteristics of a balanced assessment system:

Purpose: to provide students, educators, parents, and the public with a range of information about academic achievement and to determine the best practices and policies that will result in improvements to student learning.

Characteristics: includes a continuum of strategies and tools that are designed specifically to meet discrete needs—daily classroom instruction, periodic checkpoints during the year, and annual snapshots of achievement. (p. 6)

A balanced assessment system is an important component of quality teaching and learning. Stiggins (2007) points out that a variety of quality assessments must be available to teachers in order to form a clearer picture of student achievement of the standards. Popham (2008) believes that when an assessment is of high quality, it can accurately detect changes in student achievement and can contribute to continuous improvement of the educational system.

Probing Questions

- How might you use questioning and discussion in your classroom in a way that gives you formative assessment information on all students?
- How can you use assignments and tests as effective formative assessment?
- How could you design and implement a balanced assessment system that includes pre- and post assessments for learning?

Resources

Rick Stiggins, founder and director of the Assessment Training Institute, provides resources on the practice of assessment at http://www. assessmentinst.com/author/rick-stiggins/.

Margaret Heritage's books Formative Assessment for Literacy and Academic Language (2008, coauthored with Alison Bailey) and Formative Assessment: Making It Happen in the Classroom (2010) provide resources and practices. These books are available through bookstores.

ASCD has publications on assessment at http://www.ascd.org/ SearchResults.aspx?s=assessment&c=1&n=10&p=0.

The National Middle Schools Association provides assessment information through a search for "assessment" at http://www.nmsa.org/.

Boston (2002) recommends the following resources for assessment:

- A Practical Guide to Alternative Assessment, by J. R. Herman, P. L. Aschbacher, and L. Winters. Available at a variety of booksellers.
- Improving Classroom Assessment: A Toolkit for Professional Developers http://educationnorthwest.org/resource/700
- Classroom Assessment and the National Science Education Standards http://www.nap.edu/catalog/9847.html



References

Atkins, J. M., Black, P., & Coffey, J. (2001). Classroom assessment and the National Science Education Standards. Washington, DC: National Academy Press.

Bergen, J. R., Sladeczek, I. E., Schwarz, R. D., & Smith, A. N. (1991). Effects of a measurement and planning system on kindergartners' cognitive development and educational programming. *American Educational Research Journal*, 28(3), 683–714.

Berryman, L., & Russell, D. R. (2001). Portfolios across the curriculum: Whole school assessment in Kentucky. *English Journal*, 90(6), 76–83.

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education, 5(1), 7–74.

Boston, C. (2002). The concept of formative assessment. *Practical Assessment, Research, and Evaluation*, 8(9). Retrieved June 3, 2011, from http://pareonline. net/getvn.asp?v=8&n=9

Council of Chief State School Officers. (2008). Attributes of effective formative assessment. Washington, DC: Author. Retrieved June 3, 2011, from http://www. ccsso.org/Documents/2008/Attributes_of_Effective_2008.pdf

Darling-Hammond, L., Rustique-Forrester, E., & Pecheone, R. (2005). *Multiple measure approaches to high school graduation*. Stanford, CA: School Redesign Network at Stanford University.

DiMartino, J., & Castaneda, A. (2007). Assessing applied skills. *Educational Leadership*, 64(7), 38–42.

Dunn, K. E., & Mulvenon, S.W. (2009). A critical review of research on formative assessment: The limited scientific evidence of the impact of formative assessment in education. *Practical Assessment, Research, and Evaluation*, 14(7). Retrieved June 3, 2011, from http://pareonline.net/pdf/v14n7. pdf

Fuchs, L. S., & Fuchs, D. (1986). Effects of systematic formative evaluation: A meta-analysis. *Exceptional Children*, 52(2), 199–208.

Heritage, M., Kim, J., Vendlinski, T., & Herman, J. (2009). From evidence to action: A seamless process in formative assessment? *Educational Measurement: Issues and Practice*, 28(3), 24–31.

Herman, J. (1997). Assessing new assessments: Do they measure up? *Theory Into Practice*, 36(4), 196–204.

Martinez, J. G. R., & Martinez, N. C. (1992). Re-examining repeated testing and teacher effects in a remedial mathematics course. *British Journal of Educational Psychology*, 62(3), 356–363.

McCurdy, B. L., & Shapiro, E. S. (1992). A comparison of teacher monitoring, peer monitoring, and self-monitoring with curriculum-based measurement in reading among student with learning disabilities. *Journal of Special Education*, 26(2), 162–180.

Next Generation Assessment Task Force. (2009). *Crafting a balanced system of assessment in Wisconsin*. Madison: Wisconsin Department of Public Instruction. Retrieved June 3, 2011, from http://www.dpi.state.wi.us/oea/pdf/NGTFbr.pdf

Popham, W. J. (2008). *Transformative assessment*. Alexandria, VA: Association for Supervision and Curriculum Development.

Ramaprasad, A. (1983). On the definition of feedback. *Behavioral Science*, 28(1), 4–13.

Ross, J.A. (2006). The reliability, validity, and utility of self-assessment. *Practical* Assessment, Research and Evaluation, 11(10). Retrieved June 3, 2011, from http://pareonline.net/pdf/v11n10.pdf

Ruiz-Primo, M.A., & Furtak, E. M. (2006). Informal formative assessment and scientific inquiry: Exploring teachers' practices and student learning. *Educational Assessment*, 11(2), 205–235.

Stiggins, R. J. (2007, November–December). Assessment for learning: A key to student motivation and learning. EDge, 2(2), 1–20.

Tierney, R., Clark, C., Fenner, L., Herter, R. J., Simpson, C. S., & Wiser, B. (1998). Portfolios: Assumptions, tensions, and possibilities. *Reading Research Quarterly*, 33(4), 474–486.

Vispoel, W. P., & Austin, J. R. (1995). Success and failure in junior high school: A critical incident approach to understanding students' attributional beliefs. *American Educational Research Journal*, 32(2), 377–412.

Wang, T. H. (2007). What strategies are effective for formative assessment in a e-learning environment? *Journal of Computer Assisted Learning*, 23(1), 171–186.

Wiggins, G. (1990). The case for authentic assessment. *Practical Assessment, Research, and Evaluation*, 2(2). Retrieved June 3, 2011, from http://pareonline. net/getvn.asp?v=2&n=2



Guiding Principle 4: Learning is a collaborative responsibility.

Teaching and learning are both collaborative processes. Collaboration benefits teaching and learning when it occurs on several levels: when students, teachers, family members, and the community collectively prioritize education and engage in activities that support local schools, educators, and students; when educators collaborate with their colleagues to support innovative classroom practices and set high expectations for themselves and their students; and when students are given opportunities to work together toward academic goals in ways that enhance learning.

Research Summary

Collaborative learning is an approach to teaching and learning that requires learners to work together to deliberate, discuss, and create meaning. Smith and MacGregor (1992) define the term as follows:

"Collaborative learning" is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. Usually, students are working in groups of two or more, mutually searching for understanding, solutions, or meanings, or creating a product. Collaborative learning activities vary widely, but most center on students' exploration or application of the course material, not simply the teacher's presentation or explication of it. (p. 1)

Collaborative learning has been practiced and studied since the early 1900s. The principles are based on the theories of John Dewey (2009), Lev Vygotsky (1980), and Benjamin Bloom (1956). Their collective work focusing on how students learn has led educators to develop more student-focused learning environments that put students at the center of instruction. Vygotsky specifically stated that learning is a social act and must not be done in isolation. This principle is the foundation of collaborative learning.

The research of Vygotsky (1980) and Jerome Bruner (1985) indicates that collaborative learning environments are one of the necessities for learning. Slavin's (1989) research also suggests that students and teachers learn more, are more engaged, and feel like they get more out of their classes when working in a collaborative environment. Totten, Sills, Digby, and Russ (1991) found that those involved in collaborative learning understand content at deeper levels and have higher rates of achievement and retention than learners who work alone. They suggest that collaborative learning gives students opportunities to internalize their learning.

A meta-analysis from the Cooperative Learning Center at the University of Minnesota concluded that having students work collaboratively has significantly more impact on learning than having students work alone (Johnson, Maruyama, Johnson, Nelson, & Skon, 1981). An analysis of 122 studies on cooperative learning revealed:

- More students learn more material when they work together talking through the material with each other and making sure that all group members understand—than when students compete with one another or work alone individualistically.
- More students are motivated to learn the material when they work together than when students compete or work alone individualistically (and the motivation tends to be more intrinsic).
- Students have more positive attitudes when they work together than when they compete or work alone individualistically.
- Students are more positive about the subject being studied, the teacher, and themselves as learners in that class and are more accepting of each other (male or female, handicapped or not, bright or struggling, or from different ethnic backgrounds) when they work together.

Collaboration can be between teachers, between students, and between teacher and student.

Teacher-Teacher Collaboration

It is critical for teachers to have the time to collaborate. Professional learning communities, which provide teachers with established time to collaborate with other teachers, have become a more common practice in recent years. Louis and Kruse (1995) conducted a case study



analysis that highlighted some of the positive outcomes associated with professional learning communities, including a reduction in teacher isolation, increases in teacher commitment and sense of shared responsibility, and a better understanding of effective instructional practices. Professional learning communities encourage collaborative problem solving and allow teachers to gain new strategies and skills to improve and energize their teaching and classrooms.

Another example of teacher-to-teacher collaboration is lesson study. This professional development process began in Japan. Lesson study is a collaborative approach to designing and studying classroom lessons and practice. The most critical components of lesson study are observation of the lesson, collection of data about teaching and learning, and a collaborative analysis of the data to further impact instruction (Lewis, 2002; Lewis & Tsuchida, 1998; Wang-Iverson & Yoshida, 2005). Some of these characteristics are similar to other forms of professional development—analyzing student work, cognitive coaching, and action research, to name a few—but the fact that it focuses on teachers observing a live lesson that was collaboratively developed is different than any other form of professional development. Lesson study is a way for teachers to work together, collect data, and analyze data to reflect on teaching and learning (Lewis, 2002).

Student-Student Collaboration

Collaborative learning not only allows students to engage deeply with content but also helps students build the interpersonal skills needed to be successful in college and careers. Johnson, Johnson, and Holubec (1993) state that collaborative learning provides students with the opportunity to develop social skills. They found that many of the outcomes expected as part of a collaborative learning activity corresponded with goals for student content understanding and skill attainment. The strategies associated with collaborative learning—such as role assignments, collaborative problem solving, and task and group processing—all build the social skills that students need to be successful when working with others. Additionally, these skills are important in preparing students for the world of work, where collaborative writing and problem-solving are key elements of many careers.

There is a plethora of instructional and learning strategies that encourage student collaboration, including peer teaching, peer learning, reciprocal learning, team learning, study circles, study groups, and work groups, to name just a few (Johnson & Johnson, 1986). Collaborative inquiry, which combines many of the elements of student collaboration just mentioned, is a research-based strategy in which learners work together through various phases "of planning, reflection, and action as they explore an issue or question of importance to the group" (Goodnough, 2005 88). Collaborative inquiry brings together many perspectives to solve a problem, engaging students in relevant learning around an authentic question. It allows students to work together toward a common purpose to explore, make meaning, and understand the world around them (Lee & Smagorinsky, 2000).

Teacher-Student Collaboration

The purpose for collaboration in an educational setting is to learn and unpack content together to develop a shared understanding. Harding-Smith (1993) points out that collaborative learning approaches are based on the idea that learning must be a social act. It is through interaction that learning occurs. Johnson and Johnson (1986) similarly emphasize that when students and teachers talk and listen to each other, they gain a deeper understanding of the content and can develop the skills necessary to negotiate meaning throughout their lives.

Collaboration requires a shift from teacher-led instruction to instruction and learning that is designed by both teachers and students. Collaboration between student and teacher plays a critical role in helping students reflect and engage in their own learning experiences. The constructivist learning movement is one current example of efforts to increase the amount of collaboration between student and teacher occurring in the classroom. Mayer (2004) defines constructivist learning as an "active process in which learners are active sense makers who seek to build coherent and organized knowledge" (p. 14). Students coconstruct their learning, with the teacher serving as a guide or facilitator. The teacher does not function in a purely didactic (i.e., lecturing) role. Neo and Neo (2009) found that constructivism helps students develop problem-solving skills, critical thinking, and creative skills and apply them in meaningful ways.

Probing Questions

- How can you use collaborative learning processes to engage students in their learning?
- How might you create space for teacher-teacher collaboration within your context?



Resources

All Things PLC website provides a number of resources on professional learning communities. Links to these resources can be found at http://www.allthingsplc.info/.

The Wisconsin Center for Education Research hosts a website with many resources for collaborative and small group learning. It can be found at http://www.wcer.wisc.edu/archive/cl1/cl/..

The Texas Collaborative for Teaching Excellence has created a professional development module about collaborative learning, which provides readings, research, and resources. It can be found at http://www.texascollaborative.org/Collaborative_Learning_Module.htm.

A review of research on professional learning communities, presented at the National School Reform Faculty research forum in 2006, contains findings that outline what is known about professional learning communities and how they should be structured. This paper is available at http://www.nsrfharmony.org/research.vescio_ross_adams.pdf.

References

Bloom, B. S. (Ed.) (1956). Taxonomy of educational objectives. Handbook 1: Cognitive domain. White Plains, NY: Longman.

Bruner, J. (1985). Vygotsky: An historical and conceptual perspective. In J. V.Wetsch (Ed.), *Culture, communication, and cognition:Vygotskian perspectives* (pp. 21–34). London: Cambridge University Press.

Dewey, J. (2009). Democracy and education: An introduction to the philosophy of education. New York: Cosimo Classics.

Goodnough, Karen. (2005). Fostering teacher learning through collaborative inquiry. *The Clearing House* 79(2), 88-92.

Harding-Smith, T. (1993). Learning together: An introduction to collaborative learning. New York: HarperCollins.

Johnson, R.T., & Johnson, D.W. (1986). Action research: Cooperative learning in the science classroom. *Science and Children*, 24(2), 31–32.

Johnson, D.W., Johnson, R.T., & Holubec, E. J. (1993). *Circles of learning: Cooperation in the classroom*. Edina, MN: Interaction.

Johnson, D.W., Maruyama, G., Johnson, R.T., Nelson, D., & Skon, L. (1981). Effects of cooperative, competitive, and individualistic goal structures on achievement: A meta-analysis. *Psychological Bulletin*, 89(1), 47–62.

Lee, C. D., & Smagorinsky, P. (Eds.). (2000). Vygotskian perspectives on literacy research: Constructing meaning through collaborative inquiry. Cambridge, England: Cambridge University Press.

Lewis, C. (2002). Lesson study: A handbook of teacher-led instructional change. Philadelphia: Research for Better Schools.

Lewis, C., & Tsuchida, I. (1998, Winter). A lesson is like a swiftly flowing river: Research lessons and the improvement of Japanese education. *American Educator*, 14–17, 50–52.

Wang-Iverson, P., & Yoshida, M. (2005). Building our understanding of lesson study. Philadelphia: Research for Better Schools.

Louis, K. S., & Kruse, S. D. (1995). Professionalism and community: Perspectives on reforming urban schools. Thousand Oaks, CA: Corwin Press.

Mayer, R. E. (2004). Should there be a three strikes rule against pure discovery? The case for guided methods of instruction. *American Psychologist*, 59(1), 14–19.

Neo, M., & Neo, T.-K. (2009). Engaging students in multimedia-mediated constructivist learning: Students' perceptions. *Educational Technology and Society*, 12(2), 254–266.

Slavin, R. E. (1989). Research on cooperative learning: An international perspective. *Scandinavian Journal of Educational Research*, 33(4), 231–243.

Smith, B. L., & MacGregor, J.T. (1992). What is collaborative learning? Olympia, WA: Washington Center for Improving the Quality of Undergraduate Education. Retrieved June 3, 2011, from http:// learningcommons.evergreen.edu/pdf/collab.pdf

Totten, S., Sills, T., Digby, A., & Russ, P. (1991). Cooperative learning: A guide to research. New York: Garland.

Vygotsky, L. (1980). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.



Guiding Principle 5: Students bring strengths and experiences to learning.

Every student learns. Although no two students come to school with the same culture, learning strengths, background knowledge, or experiences, and no two students learn in exactly the same way, every student's unique personal history enriches classrooms, schools, and the community. This diversity is our greatest education asset.

Research Summary

The authors of the groundbreaking work *How People Learn: Brain, Mind, Experience, and School* (Bransford, Brown, & Cocking, 2000) found that students' preconceptions may clash with new concepts and information they learn in school. If those preconceptions are not addressed, students may fail to grasp what is being taught or may learn only to pass a test. In other words, a student might enter kindergarten believing the world is flat because he or she has seen a flat map. Despite the presentation of geographic names and principles, the student still maintains the fundamental preconception about the shape of the world. Developing competence—or in this case, a knowledge of the shape of the world—requires that students have a deep foundation of factual knowledge, a context or conceptual framework to place it in, and the opportunity to explore how it connects to the real world. Ultimately, a metacognitive approach—one that pushes students to think about their own thought processes—can help them take control of their own learning.

As educational research on how people learn advances, so does our approach to teaching and learning. Strategies to advance teaching and learning are constantly evolving into new and innovative ways to reach learners. When a teacher uses students' interests, curiosity, and areas of confidence as starting points in planning instruction, learning is more productive. Teachers who are cognizant of these issues—and reflect on how to use them as strengths upon which they can build—ensure that all students have access to the content. Areas to consider are student strengths, gender, background knowledge, and connections to the home environment.

Building on Student Strengths

Teaching to students' strengths can improve student engagement (Sternberg, 2000, Sternberg & Grigorenko, 2000). Many students have strengths that are unrecognized and neglected in traditional schooling. Students in underrepresented minority groups have culturally relevant knowledge that teachers can use to promote learning. Sternberg et al. (2000) found that conventional instruction in school systematically discriminates against students with creative and practical strengths and tends to favor students with strong memory and analytical abilities. This research, combined with Sternberg's earlier (1988) research showing that teaching for diverse styles of learning produces superior results, suggests that capitalizing on the various strengths that all students bring to the classroom can positively affect students' learning. When students are taught in a way that fits how they think, they do better in school (Sternberg, 2000; Sternberg & Grigorenko, 2000). Sternberg and O'Hara (2000) found that when students were taught in a way that incorporated analytical thinking, creative thinking (creating, imagining, and inventing) and practical thinking (applying, implementing, and putting into practice)-students achieved at higher levels than when taught using conventional instructional methods.

Gender Considerations

Changing instruction might help alleviate the gender gap in literacy achievement. Research conducted by Sax (2005) reveals that boys fall behind girls in reading and writing early on and never catch up. Sax (2007) found that this dynamic plays a role in higher high school dropout rates for males, particularly black males. The college graduation rate for females approaches twice that of males in Hispanic and black populations. Many classrooms are a better fit for the verbal-emotive, sit-still, takenotes, listen-carefully, multitasking girl (Sax, 2005). The characteristics that boys bring to learning—impulsivity, single-task focus, spatial-kinesthetic learning, and physical aggression—often are viewed as problems.



Researchers such as Blum (1997) have identified more than 100 structural differences between the male and female brains. Altering strategies to accommodate more typically male assets—for example, the use of multimodal teaching (discussed on pages 10-11 of this report); the use of various display formats, such as printed material, videos, presentations, and computers; and an interactive learning environment to appeal to different learning styles—can help bridge the gap between what students are thinking and what they are able to put down on paper. Sadik's (2008) research suggests that using multimodal instructional strategies like digital storytelling—allowing students to incorporate digital cameras, creative and editing tools, computers, and other technology to design multimedia presentations—deepens students' learning.

Background Knowledge

Bransford et al. (2000) note in How People Learn, learning depends on how prior knowledge is incorporated into building new knowledge, and thus teachers must take into account students' prior knowledge. Jensen's (2008) research on the brain and learning demonstrates that expertise cannot be developed merely through exposure to information. Students must connect the information to their prior knowledge to internalize and deepen their understanding. Teachers can connect academic learning with real-life experiences. Service learning, project-based learning, schoolbased enterprises, and student leadership courses are some examples of how schools are trying to make the curriculum relevant. The key to making the curriculum relevant is asking the students to help connect the academics to their lives; this approach gets students actively engaged in their learning, which builds a stronger connection and commitment to school. Bell (2010) suggests that strategies such as project-based approaches to learning can help ensure that content and skills are taught together and connected to prior knowledge, which helps students understand how to develop and apply new skills in various contexts.

Connections to the Home Environment

Cochran-Smith (2004) emphasizes family histories, traditions, and stories as an important part of education. Often, children enter school and find themselves in a place that does not recognize or value the knowledge or experience they bring from their homes or communities. This situation can create a feeling of disconnect for students—a dissonance obliging them to live in and navigate between two different worlds, each preventing them from full participation or success in the other. Districts and schools can alleviate this dissonance by valuing and taking advantage of the unique experiences that each student brings to the classroom. Emphasizing connections to parents and community, recognizing and utilizing student strengths and experiences, and incorporating varied opportunities within the curriculum can help alleviate this dissonance.

Ferguson (2001) points out that it is particularly important to establish connections that not only bring the parents into the school environment but also encourage school understanding and participation within the community. Social distinctions often grow out of differences in attitudes, values, behaviors, and family and community practices (Ferguson, 2001). Students need to feel their unique knowledge and experience is valued by the school, and parents and community members need to feel they are respected and welcome within the school.

Although much attention has been paid to No Child Left Behind (NCLB) requirements for annual achievement tests and high-quality teachers, the law also includes important requirements for schools, districts, and states to organize programs of parental involvement and to communicate with parents and the public about student achievement and the quality of schools. Epstein (2005) offers perspectives on the NCLB requirements for family involvement; provides a few examples from the field; suggests modifications that are needed in the law; and encourages sociologists of education to take new directions in research on school, family, and community partnerships.

Probing Questions

- What are some ways that you currently use students' background knowledge to inform instruction?
- Does your experience teaching boys to read and write concur with the research? What ideas do you have to address the achievement gaps related to gender?
- What are ways you can uncover, acknowledge, and use students' backgrounds and strengths to enhance learning?
- What are some strategies for valuing and taking advantage of the unique experiences that each student brings to the classroom?



Resources

A good resource still valid today is *Making Assessment Work for Everyone: How to Build on Student Strengths.* See the SEDL website to download this resource: http://www.sedl.org/pubs/tl05/.

A short, easy-to-digest article from Carnegie Mellon University is titled *Theory and Research-Based Principles of Learning*. The article and full bibliography are at http://www.cmu.edu/teaching/principles/learning.html.

References

Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House*, 83(2), 39–43. Retrieved June 3, 2011, from http://teacherscollegesj.org/resources/publications/PBL%20for%20the%20 21%20Century.pdf

Blum, D. (1997). Sex on the brain: The biological differences between men and women. New York: Viking.

Bransford, J. D., Brown, A. L. & Cocking, R. R. (Eds.). (2000). How people learn: *Brain, mind, experience, and school* (Expanded ed.). Washington, DC: National Academy Press.

Cochran-Smith, M. (2004). Walking the road: Race, diversity, and social justice in teacher education. New York: Teachers College Press.

Epstein, J. (2005). Attainable goals? The spirit and letter of the No Child Left Behind Act on parental involvement. *Sociology of Education*, 78(2), 179–182.

Ferguson, A.A. (2001). Bad boys: Public schools in the making of black masculinity. Ann Arbor: University of Michigan Press.

Jensen, E. P. (2008). A fresh look at brain-based education. *Phi Delta Kappan*, 89(6), 408–417.

Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational Technology Research and Development*, 56(4), 487–506.

Sax, L. (2005). Why gender matters: What parents and teachers need to know about the emerging science of sex differences. New York: Doubleday.

Sax, L. (2007). Boys adrift: The five factors driving the growing epidemic of unmotivated boys and underachieving young men. New York: Basic Books.

Sternberg, R. J. (1988). The triarchic mind: A new theory of human intelligence. New York: Viking.

Sternberg, R. J. (2000). Wisdom as a form of giftedness. *Gifted Child Quarterly*, 44(4), 252–259.

Sternberg, R. J., & Grigorenko, E. L. (2000). *Teaching for successful intelligence*. Arlington Heights, IL: Skylight Training.

Sternberg, R. J., Grigorenko, E. L., Jarvin, L., Clinkenbeard, P., Ferrari, M., & Torff, B. (2000, Spring). The effectiveness of triarchic teaching and assessment. *NRC/GT Newsletter*, 3–8. Retrieved June, 3, 2011, from http://www.gifted.uconn.edu/nrcgt/newsletter/spring00/spring00.pdf

Sternberg, R. J., & O'Hara, L.A. (2000). Intelligence and creativity. In R. J. Sternberg (Ed.), *Handbook of intelligence* (pp. 611–628). New York: Cambridge University Press.

Vygotsky, L. S. (1980). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.



Guiding Principle 6: Responsive environments engage learners.

Meaningful learning happens in environments where creativity, awareness, inquiry, and critical thinking are part of instruction. Responsive learning environments adapt to the individual needs of each student and encourage learning by promoting collaboration rather than isolation of learners. Learning environments, whether classrooms, schools, or other systems, should be structured to promote engaged teaching and learning.

Research Summary

To be effective for all students, classroom learning environments must be responsive to a broad range of needs among a diverse student population. These diverse needs include cultural and linguistic differences as well as developmental levels, academic readiness, and learning styles. A responsive learning environment engages all students by providing a respectful climate where instruction and curriculum are designed to respond to the backgrounds and needs of every student.

Culturally Responsive Teaching

Research on culturally responsive teaching emphasizes the importance of teachers' understanding the cultural characteristics and contributions of various ethnic groups (Smith, 1998) and showing respect toward these students and their culture (Ladson-Billings, 1995; Pewewardy & Cahape, 2003). Culturally responsive teaching is defined by Gay (2002) as "using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (p. 106).

Research on culturally responsive teaching has found that students both are more engaged in learning and learn more effectively when the knowledge and skills taught are presented within a context of their experience and cultural frames of references (Au & Kawakami, 1994; Gay, 2000; Ladson-Billings, 1995). Areas considered part of creating a culturally responsive learning environments are (1) understanding the cultural lifestyles of their students, such as which ethnic groups give priority to communal living and problem solving; (2) knowing differences in the modes of interaction between children and adults in different ethnic groups; and (3) becoming aware of cultural implications of gender role socialization among different groups (Banks & Banks, 2001). To provide a culturally responsive learning environment teachers need to:

- Communicate high expectations for all students (Gay, 2000; Hollins & Oliver, 1999; Ladson-Billings, 1994, Nieto, 1999).
- Use active teaching methods and act as learning facilitators (Banks & Banks, 2001; Gay, 2000).
- Maintain positive perspectives on families of diverse students (Delgado-Gaitin & Trueba, 1991).
- Gain knowledge of cultures of the students in their classrooms (Banks & Banks, 2001; Nieto, 1999).
- Reshape the curriculum to include culturally diverse topics (Banks & Banks, 2001; Gay, 2000; Hilliard, 1991).
- Use culturally sensitive instruction that includes student-controlled discussion and small-group work (Banks & Banks, 2001; Nieto, 1999).

Further research asserts that culturally responsive teachers help students understand that knowledge is not absolute and neutral but has moral and political elements. This knowledge can help students from diverse groups view learning as empowering (Ladson-Billings, 1995; Tharp & Gallimore, 1988).

Strategies for designing curriculum and instruction for culturally diverse students are similar to the strategies for differentiating curriculum and instruction. In fact, Mulroy and Eddinger (2003) point out that the research on differentiation emerged, in part, because of the demand on schools to serve an increasingly diverse student population. Heacox (2002) asserts that classrooms are diverse in cognitive abilities, learning styles, socioeconomic factors, readiness, learning pace, and gender and cultural influences.



Differentiation

Research on differentiation includes meeting the learning needs of all students through modifying instruction and curriculum to consider developmental level, academic readiness, and socioeconomic backgrounds, as well as cultural and linguistic differences. Tomlinson (2005) defines differentiated instruction as a philosophy of teaching based on the premise that students learn best when their teachers accommodate the difference in their readiness levels, interests, and learning profiles. In a differentiated learning environment, each student is valued for his or her unique strengths while being offered opportunities to learn and demonstrate learning through a variety of strategies (Mulroy & Eddinger, 2003). Hall (2002) states, "To differentiate instruction is to recognize students' varying backgrounds, readiness, language, learning preferences, and interests and to react responsively" (p. 1).

According to Tomlinson (2005), who has written extensively on differentiation, three elements guide differentiated instruction: content, process, and product. *Content* means that all students are given access to the same content but are allowed to master it in different ways. Process refers to the ways in which the content is taught. *Product* refers to how students demonstrate understanding. Corley (2005) provides three questions that drive differentiation: (1) What do you want the student to know? (2) How can each student best learn this? and (3) How can each student most effectively demonstrate learning? Maker (1986) offers a framework through which differentiation can occur in the classroom:

- Create an encouraging and engaging learning environment through student-centered activities, encouraging independent learning, accepting student contributions, using a rich variety of resources, and providing mobility and flexibility in grouping.
- Modify the content according to abstractness and complexity. Provide a variety of content and particularly content focused on people.
- Modify the learning process through use of inquiry, higher-order thinking activities, group interactions, variable pacing, creativity and student risk-taking, and freedom of choice in learning activities.
- Modify the product through facilitating different ways for students to demonstrate learning, such as the use of authentic assessments.

In addition, researchers have found that the use of flexible grouping and tiered instruction for differentiation increases student achievement (Corley, 2005; Tomlinson & Eidson, 2003). Heacox (2002) describes differentiation as follows:

The focus is not on the adjustment of the students, but rather the adjustment of teaching and instructional strategies making it about learning, not teaching. The teacher is the facilitator who...puts students at the center of teaching and learning and lets his or her students' learning needs direct instructional planning (p. 1).

Several studies conducted in elementary and middle school classroom have found that student achievement is increased in differentiated classrooms (Connor, Morrison, & Katch 2004; McAdamis, 2001). Tomlinson and Eidson (2003) emphasize the need to include the components of student readiness, student interest, and student learning profile in differentiating instruction. Students' interests and learning profiles are often tied to their learning styles.

Learning Styles

The body of research on learning styles has coalesced around the work of Howard Gardner, who introduced the theory of multiple intelligences in 1983. Gardner's work suggests that the concept of a pure intelligence that can be measured by a single I.Q. score is flawed, and he has identified nine intelligences that people possess to various degrees. His theory asserts that a person's type of intelligence determines how he or she learns best (Gardner, 1999).

Learning style refers to how a student learns, and the concept takes into account cultural background and social and economic factors as well as multiple intelligences. Beishuizen and Stoutjesdjik (1999) define *learning* style as a consistent mode of acquiring knowledge through study, or experience. Research has shown that the quality of learning at all levels of education (primary, secondary, and higher education) is enhanced when instruction and curriculum take into account individual learning styles (Dunn, Griggs, Olsen, Beasley & Gorman, 1995). Another study found that student learning improved when the learning environment was modified to allow students to construct personally relevant knowledge and to engage in the materials at different levels and from different points of view (Dearing, 1997).



A responsive classroom environment considers the individual learning needs of all students. These learning needs include a variety of factors that influence how students learn: culture, language, developmental level, readiness, social and economic background, and learning style.

Creativity

Creativity is an essential component for creating an engaging and accessible classroom environment. The Wisconsin Task Force on Arts and Creativity in Education (2009) defines *creativity* as a process that combines "imagination, creativity, and innovation to produce something novel that has value" (p. 14). Sir Ken Robinson (2011) and Daniel Pink (2006) both support the need for schools to focus on creating classroom that foster this type of creativity in students. According to Robinson (2011), classrooms that foster creativity and allow students to question assumptions, look at content through various lenses, and create new understandings can help students be more successful in postsecondary education and the workplace.

Probing Questions

- Describe two or three ways you might differentiate the instruction in your classroom. How might you share this with a new teacher?
- How might you implement a simple strategy for assessing your students' learning styles?

Resources

ASCD offers a number of resources on differentiated instruction, including work by Carol Ann Tomlinson, at http://www.ascd.org.

For resources on culturally responsive teaching, the Center for Culturally Responsive Teaching and Learning can be accessed at http://www.culturallyresponsive.org/.

The website of the National Center for Culturally Responsive Education Systems (NCCRESt) can be accessed at http://www.nccrest.org.

For learning styles and resources on multiple intelligences, Thomas Armstrong hosts a website with information on Gardner's Theory of Multiple Intelligences and related teaching resources at http://www. thomasarmstrong.com/multiple_intelligences.php.

Creativity: Its Place in Education is a report that offers suggestions for creative classrooms and teaching. This report can be found at http://www.jpb.com/creative/Creativity_in_Education.pdf.

The report of the Wisconsin Task Force on Arts and Creativity in Education offers recommendations for policy and practice. This report can be found at ftp://doaftp04.doa.state.wi.us/doadocs/taskforce_report_final2009pdf.

References

Au, K. H., & Kawakami, A. J. (1994). Cultural congruence in instruction. In E. R. Hollins, J. E. King, & W. C. Hayman (Eds.), *Teaching diverse populations: Formulating a knowledge base* (p. 5–23). Albany: State University of New York Press.

Banks, J.A., & Banks, C.A. (2001). *Multicultural education: Issues and perspectives* (4th ed.). New York: Wiley.

Beishuizen, J. J., & Stoutjesdjik, E.T. (1999). Study strategies in a computer assisted study environment. *Learning and Instruction*, 9(3), 281–301.

Connor, C. M., Morrison, F. J., & Katch, L. E. (2004). Beyond the reading wars: Exploring the effect of child-instruction interactions on growth in early reading. *Scientific Studies of Reading*, 8(2), 305–336.

Corley, M. (2005). Differentiated instruction: Adjusting to the needs of all learners. Focus on Basics: Connecting Research and Practice, 7(C), 13-16.

Dearing, R. (1997). Higher education in the learning society: Report of the National Committee. London: HMSO.

Delgado-Gaitan, C., & Trueba, H. (1991). Crossing cultural borders: Education for immigrant families in America. London: Falmer.

Dunn, R., Griggs, S., Olsen, J., Beasley, M., & Gorman, B. (1995). A metaanalytic validation of the Dunn and Dunn model of learning-style preferences. *Journal of Educational Research*, 88(6), 353–362.



Gardner, H. (1999). Intelligence reframed: Multiple intelligences for the 21st century. New York: Basic Books.

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.

Gay, G. (2002). Preparing for culturally responsive teaching. Journal of Teacher Education, 53(2) 106–116.

Heacox, D. (2002). Differentiating instruction in the regular classroom: How to reach and teach all learners, Grades 3–12. Minneapolis, MN: Free Spirit.

Hilliard, A. G., III. (1991). Why we must pluralize the curriculum. *Educational Leadership*, 49(4), 12–16.

Hollins, E. R., & Oliver, E. I. (1999). Pathways to success in school: Culturally responsive teaching. Mahwah, NJ: Erlbaum.

Ladson-Billings, G. (1994). The dreamkeepers: Successful teachers of African American children. San Francisco: Jossey-Bass.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. American Educational Research Journal, 32(3), 465–491.

Maker, C. J. (1986). Critical issues in gifted education: Defensible programs for the gifted. Rockville, MD: Aspen.

McAdamis, S. (2001). Teachers tailor their instruction to meet a variety of student needs. *Journal of Staff Development*, 22(2), 1–5.

Mulroy, H., & Eddinger, K. (2003, June). *Differentiation and literacy*. Paper presented at the Institute on Inclusive Education, Nazareth College of Rochester, Rochester, NY.

Nieto, S. (1999). The light in their eyes: Creating multicultural learning opportunities. New York: Teachers College Press.

Pewewardy, C. H., & Cahape, P. (2003). Culturally responsive teaching for American Indian students. *ERIC Digest*. Retrieved June 3, 2011, from http://www.ericdigests.org/2005-1/teaching.htm

Pink, D. H. (2006). A whole new mind: Why right-brainers will rule the future. New York: Riverhead.

Robinson, Ken. (2011). Out of our minds: Learning to be creative. West Sussex, United Kingdom: Capstone.

Smith, G. P. (1998). Common sense about common knowledge: The knowledge bases for diversity. Washington, DC: American Association of Colleges for Teacher Education.

Tharp, R. G., & Gallimore, R. (1988). Rousing minds to life: Teaching, learning, and schooling in social context. Cambridge: England: Cambridge University Press.

Tomlinson, C.A. (2005). Grading and differentiation: Paradox or good practice? *Theory Into Practice*, 44(3) 262–269.

Tomlinson, C.A., & Eidson, C. C. (2003). Differentiation in practice: A resource guide for differentiating curriculum. Grades 5–9. Alexandria, VA: Association for Supervision and Curriculum Development.

Wisconsin Task Force on Arts and Creativity in Education. (2009). A plan for action. Madison: Wisconsin Department of Public Instruction. Retrieved June 3, 2011, from ftp://doaftp04.doa.state.wi.us/doadocs/ taskforce_report_final2009.pdf