

Taken for Granted

Why Curriculum Content Is Like Oxygen

BY CAROLYN GOSSE
AND LISA HANSEL

When asked what matters most in life, it's easy to quickly answer family and friends. It's loved ones we care about most, so the answer is appropriate—but is it entirely accurate? Of course not. The precise answer, which no one wants to hear, begins with oxygen.

Life is full of such social conventions. Many are beneficial (at least for easing communication), and most are harmless. But sometimes the “appropriate” answer goes unexamined for too long. Sometimes an accurate answer is needed. We see a parallel situation in discussions of school improvement. Whether in casual conversations or even in serious debates, there seems to be a de facto, appropriate answer as to what matters most in creating a good school: great teachers and supportive parents. Not that these things are unimportant; just like family and friends, they are essential. But is there a more accurate answer, one that, like oxygen, is taken for granted? We contend that there is: the content of the curriculum, the specific knowledge and skills taught each day.

Experience tells us that curriculum is glossed over in different ways by educators and policy leaders.

For educators, the content of the curricu-

lum really is like oxygen. Teaching is always about something, and that something has to be specified before any other decisions can be made. That's so obvious that it's assumed, prompting educators to jump to other factors in thinking about what's essential to a great school. Don't get us wrong: the curriculum doesn't make a school great all by itself any more than oxygen alone makes us live. Both are merely necessary preconditions. Yet while it is possible to find a struggling school with a great curriculum, finding a good school with a weak curriculum is about as likely as finding a human being who can live without oxygen. Regrettably, when educators take the content of the curriculum for granted, they lose opportunities

to coordinate and collaborate. Students may be learning something valuable in each grade or course, but they do not receive the benefits of a coherent, cumulative, cross-curricular experience.

Many leaders in education policy, on the other hand, seem to have no idea that curriculum matters. Some don't even realize that standards and curricula are not the same thing. Theoretically, we could blame the educators for not explaining to the policy-

All of the images shown within this article come from the Core Knowledge Language Arts Preschool program. The program contains seven units; each unit has its own teacher guide, four of which are shown below.



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makers that curriculum is like oxygen—but in the real world we can't. In an era of "100 percent proficient or else," what sane educators would encourage policymakers to "improve" their oxygen? Teachers realize, after all, that their evaluations are increasingly tied to student scores on high-stakes tests. As a result, they are reluctant—and rightfully so—to invite policymakers to offer what are likely to be similarly flawed suggestions about what the curriculum for each grade level should look like.

preschool, and state standards. Conclusion: "Curriculum effects are large compared to most popular policy levers."

This is why we are drawing attention to the oxygen: it is the necessary precondition for improving schools, closing the achievement gap, engaging parents, and preparing teachers.

Trying again a couple of years ago, Whitehurst and Matthew Chingos published "Choosing Blindly: Instructional Materials, Teacher Effectiveness, and the

knowledge and skills to be taught in each grade; children who change schools will benefit immediately—and so will their teachers.

These are bold claims. They rest only in small part on research, like Whitehurst's, showing the relative power of curriculum. The fact is, there has been nowhere near enough research conducted on curriculum. But lots of relevant research has been done by cognitive scientists on how children learn. It is on this large body of evidence that we build our bold claims.

Child Friendly, Content Rich

As the articles on pages 4 and 14 of this issue explain, several findings have emerged that are critical to early education. For example, knowledge builds on knowledge, so it is essential to begin building broad academic knowledge and vocabulary in the early years. In addition, repeated and varied exposures to concepts and vocabulary are needed for solid understandings to take root in long-term memory. Therefore, the content of instruction should be carefully planned to introduce topics early, and then teachers can intentionally revisit, deepen, and extend learning on these topics in later grades.

For educators in preschool through third grade who don't have the time or support to create such a curriculum, one potential model to adopt or adapt is Core Knowledge Language Arts (CKLA).^{*} The CKLA program envisions reading as a two-lock box—a box that takes two keys to open. One key is knowledge of the code (the sound-letter correspondences), which must be mastered for fluent reading and writing. The other key is knowledge of words and the world, which is essential for language comprehension (both oral and written). Both keys are addressed throughout the program. The first key is developed with a phonics-based approach, as reading and writing skills are taught in tandem. The second key is developed primarily through teacher read-alouds, along with text-based discussions and activities.

While CKLA's skills instruction is absolutely essential, it is not all that different from other research-based phonics pro-

^{*}To learn more about Core Knowledge Language Arts, see "More Than Words: An Early Grades Reading Program Builds Skills and Knowledge," in the Fall 2012 issue of *American Educator*, available at www.aft.org/pdfs/americaneducator/fall2012/dubin.pdf.



These are three of the 56 posters with nursery rhymes and songs that are used throughout the school year.

Unfortunately, the very lack of any discussion about the curriculum virtually ensures that the standards regime cannot attain its goal of raising student proficiency. There is no more direct connection to student achievement—i.e., what students know and can do—than what students have been taught.

It has been nearly five years since Russ Whitehurst of the Brookings Institution wrote "Don't Forget Curriculum,"¹ noting that "policy makers who cut their teeth on policy reforms in the areas of school governance and management rather than classroom practice [are] people who may be oblivious to curriculum for the same reason that Bedouin don't think much about water skiing." Importantly, Whitehurst compared the impact of curricular improvements to that of other reforms, such as charter schools, altering the teacher workforce,

Common Core."² Examining curriculum effects versus teacher effects, they found that implementing a better curriculum can have a slightly greater impact on student learning than teachers whose value-added data puts them at the 75th percentile (as compared with a 50th percentile teacher). While teacher quality is the clear leader in policy discussions of what matters most, these findings indicate that curriculum is just as important as teaching.

Since curriculum matters, everyone ought to act like it matters—and educators should have the opportunity to lead the way. Within schools, educators can work together to adopt, adapt, or create a coherent, grade-by-grade curriculum that maximizes cross-discipline connections and efficiently builds knowledge and skills. Across schools in areas with high student mobility, they can agree to a set of specific

grams. What makes CKLA unique is the content-rich read-alouds, in which teachers read texts to students and engage them in conversations about the text and accompanying images. These read-alouds and discussions, which range from 20 to 30 minutes, are organized in 7 to 12 domains per grade. Each domain is dedicated to a particular topic that the class stays focused on for 10–15 days. Domains include “The Five Senses,” “Native Americans,” “Astronomy,” “Early Asian Civilizations,” “Insects,” and more. The domains are carefully organized to build on each other within and across grades, giving students opportunities to refine and expand their knowledge and vocabulary over time. The topics are interesting and engaging too, as the content goes well beyond standard early grades fare (such as social studies that reviews families and neighborhoods year after year, and science focused on basic information about weather, plants, and animals) to include important historical and scientific events, ideas, and people.

Children in CKLA are immersed in sophisticated content, but it isn’t just randomly dropped in. Accessible concepts—like families and communities—are purposefully introduced in preschool and then revisited and extended in later grades—such as the first-grade “Early World Civilizations” domain. Given the complexity and long-ago history of such a topic, some may question whether young children can meaningfully learn about ancient Egypt. The answer is absolutely.

As Daniel T. Willingham explained in these pages several years ago, “*no content is inherently developmentally inappropriate.*”³ It turns out that Piaget’s notion of discrete developmental stages is not correct; young children not only differ from each other, their individual performance will vary from task to task and day to day. If children don’t understand a lesson, Willingham encourages teachers to ask why—and to ask if it really matters. Perhaps the children need more background knowledge or a different explanation, not more time to “develop.” And perhaps it’s just fine for them to start forming a concept, but not grasp each detail:

For example, suppose your preschool students have learned about Martin Luther King Jr., but you are having a

hard time getting them to understand that he was a real person who is no longer here, and that fictional characters such as Mary Poppins are not here and never were. If it’s hard for a 4-year-old to conceive of people living in different times and places, does that mean that history should not be taught until the child is older? Such an argument would not make much sense to a developmental psychologist. For children and adults, understanding of any new concept is inevitably incomplete. The preschoolers can still learn something

A great curriculum is the necessary precondition for improving schools, closing the achievement gap, engaging parents, and preparing teachers.

about who King was and what he stood for. Their mistaken belief that they might encounter him at a local store, or that he lives at a school that bears his name, will be corrected in time. Indeed, how do children learn that some people are fictional and some are not? Not by a magical process of brain maturation. Children learn this principle as they learn any other—in fits and starts, sometimes showing that they understand and other times not. *If you wait until you are certain that the children will understand every nuance of a lesson, you will likely wait too long to present it.* If they understand every nuance, you’re probably presenting content that they’ve already learned elsewhere.

Teachers using CKLA have found this to be true: young children enjoy hearing about and discussing complex concepts—and any misconceptions that preschoolers and kindergartners have are cleared up as topics are revisited in grades 1 through 3. According to Jena Peluso, a teacher at P.S. 333 in Queens, New York, students have “responded to the material exceptionally well”:⁴

For example, last year I visited the Museum of Natural History with my first grade students, and as we were walking through the ancient Egyptian exhibit in the museum, the students were amazed that they were getting to see things in person that they were learning about all month. Not only were the students amazed, but other museum goers and tourists were amazed at the rich vocabulary that was coming out of these little six-year-olds’ mouths. The students were able to recognize everything from the Sphinx to the sarcophagus, it was

truly rewarding as a teacher to see this happening as a result of teaching this rigorous curriculum.

This early foundation enables second- and third-graders to really grasp historical and scientific content that has traditionally been reserved for middle school.

For example, at Thomas Jefferson Classical Academy in Forest City, North Carolina, a charter school that serves a rural, predominantly working-class community, Heidi Cole’s second-graders eagerly learn 19th- and 20th-century American history:⁵

With confidence, I can say that I have not only “taught” my students about ... the War of 1812, Westward Expansion, and the Civil War, but my students have truly “learned” something about these topics. ... My students embrace the stories of hardship faced by slaves in the South. The result is empathy, followed by a desire to learn more, and the hope of a slavery-free world. Hearing the stories of slavery through the eyes of a child such as Minty (Harriet Tubman) helps children make important connections. ... Awareness of slavery also helps prepare students with the

necessary background needed to later understand the Civil Rights domain [at the end of second grade]. ... Providing such strong background knowledge at a young age will enable these learners to develop a deep level of understanding about our country's history and its government.

It will indeed. The path to college, career, and citizenship begins in early childhood, so let's take a closer look at CKLA for preschool.

A Unique Pre-K Curriculum

CKLA Preschool is a comprehensive language arts curriculum that explicitly supports the development of knowledge and skills identified as key to building skilled, fluent readers.* In addition to systematically building children's knowledge of letters, sounds, and print, CKLA Preschool is

*To learn more about Core Knowledge Language Arts Preschool, see the general overview at www.bit.ly/1bRKZJD. To download the entire CKLA program, preschool through third grade, for free, see www.coreknowledge.org/ckla-files.

designed to expose young children to content-rich, coherent, cumulative instruction. It does so by building and deepening background knowledge using teaching practices that are appropriate for young children and generally familiar to early educators. Students and teachers engage in activities like singing songs and nursery rhymes, playing games in small groups, creating extended dramatic play scenarios, making crafts, reading books, and listening to stories. These activities not only are fun and appropriate experiences for young children, but

Content on the Cutting-Room Floor

A Brief History of the Elementary Curriculum

BY RUTH WATTENBERG

The basic treatment of content in the elementary grades has not changed for decades. *A Nation at Risk*, the 1983 report of the National Commission on Excellence in Education,¹ decried “disturbing inadequacies” in American education, including the wholly inadequate content offered to students.

That report helped launch several decades of education reform, aimed at rectifying, however inadequately, the problems that it found. Among the changes were stiffer high school course requirements in the core subjects;² subject-matter exams in a growing number of states (as opposed to minimum competency tests);³ increased numbers of students taking more-advanced courses (though students are not always learning more as a result);⁴ and state adoption of academic standards in major subject areas. Thirty years after *A Nation at Risk*, a new infrastructure—in the form of state-mandated requirements, standards, and exams—is in place, with the potential to support, encourage, and monitor greater learning at the high school level.

But, *A Nation at Risk* had a glaring omission: reflecting the nation's long-

standing lack of interest in content in the early grades, the report's authors barely mentioned elementary schools. Unsurprisingly, as a result, the post-1983 education reforms barely touched them. Here is the

reading, commonly known as basal readers, which for many years have served as the spine of the reading curriculum. In 1983, William Schmidt and his colleagues at the Institute for Research on Teaching analyzed

U.S. elementary schools in the 1980s were woefully thin on content. Since then, that has not changed.

crucial fact about the teaching of content in the elementary grades, then and still: too much time is spent on reading and math, especially reading, and too little on history/social studies, science, literature, and arts—the content subjects that build a student's foundation of knowledge.

Even before *A Nation at Risk*, the 1977 National Survey of Science, Mathematics, and Social Studies Education found that K–3 teachers spent 95 minutes per day on reading and a total of 38 minutes on *both* science and social studies together—2.5 times as much on reading as on both other subjects.⁵ In grades 4–6, when students have presumably learned the basic reading skills and in-class reading time can be substantially cut back, teachers spent 66 minutes per day on reading, 28 on science, and 34 on social studies—with reading still getting more time than the two other subjects combined.⁶

Was there any academic content or knowledge taught in those hours devoted to reading? The best way to find out is to look at the textbooks used to teach

34 basal readers for the second, fourth, and fifth grades, from eight major publishers, for a total of 1,959 different selections. Here is what they found:⁷

- 42 percent had no subject-matter content at all (defined as covering theories, facts, and information from typical elementary subjects, such as math, science, and social studies);
- 20 percent had content that was of a language arts nature—how words were formed, etc.;
- 20 percent had social science content (a third of which was “social themes,” concerning “enduring problems of individual and social life,” such as growing up, living with family members, etc.);
- 12 percent had science content; and
- Less than 6 percent had content in any other major subject-matter area, including art and music.

And, the lower the grade, the emptier it was of content. In second-grade books, 52 percent of the texts had no subject-matter

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are designed to create explicit opportunities for students to connect to specific content in the curriculum.

Infused throughout all grades of CKLA, but unique among preschool curricula, is the careful consideration given to the timing and sequencing of this content and how it contributes to students' later learning. Topics and subtopics are presented in a deliberately planned order, so that basic information and larger concepts build over time.

The end result is broad academic knowledge and skills, but what is the starting

point in early childhood? Since many, many students arrive at preschool without prior educational experience, CKLA Preschool begins with the child himself. Starting with students' own experiences of themselves is a deliberate choice aimed at finding common ground for all students, regardless of socioeconomic or educational background. Moving all students forward together from this common place then becomes the aim of the first preschool domain, called "All About Me."

"All About Me" begins with the vocabu-

lary and content the child needs to talk about himself—age, body parts, hair color, likes and dislikes, favorite activities, etc. Teachers and students read aloud and sing favorite songs and nursery rhymes (e.g., "Head and Shoulders, Knees and Toes" and "Where Is Thumbkin?") as they teach this content (see the sidebar on page 26). Strategically, they use these rhymes to teach and reinforce not only content, but also skills that prepare children to become fluent decoders in later grades. Essential early skills include

content at all. Some 11 percent had science content and 14 percent social science.⁸ Taken as a whole, U.S. elementary schools in the 1980s were woefully thin on content.

Since then, that has not changed. The content-poor curriculum remains a staple at the elementary level. In contrast to secondary schools, most of the reform energy at the elementary level has focused on beefing up instruction in basic reading and math skills, with no infrastructure for driving improvements in the content areas. Even the academic content standards developed by states were typically weakest in the elementary grades.

The Fordham Institute has evaluated state standards in science and history periodically since 1998. Its reviewers have often aimed their greatest criticism at the early-grade standards, finding that they contain virtually no content, are repetitious across grades, and fail to address either sequencing or rigor.⁹

Like standards, textbooks have continued to neglect the content that underlies reading comprehension. For example, 20 years after Schmidt's study of basal textbook content, Kate Walsh, now director of the National Council on Teacher Quality, in 2003 reviewed the first- and second-grade texts from five top-selling basal-reader series. She found that they offered "mostly incoherent, banal themes that missed opportunities to develop word and world knowledge by offering and exploiting content-rich themes."¹⁰

The recent policy emphasis on reading skills has led schools to further increase the time devoted to the English language arts block, leaving even less time devoted to history/social studies, science, and the arts than in earlier years. As shown in the table above, according to the National Survey of Science and Mathematics Education, the total time spent in grades K–3 on both

science and social studies dropped 45 minutes per week from 2000 to 2012—from 3 hours and 40 minutes in 2000 to 2 hours and 55 minutes in 2012—meaning just 19 minutes per day for science and 16 minutes per day for social studies! (It had risen slightly between 1977 and 2000; it is now lower than it was in 1977.) In grades 4–6, the drop between 2000 and 2012 was 95 minutes per week.¹¹

In 2010, in a national survey of teachers conducted by Common Core* (an independent organization unconnected to—though supportive of—the Common Core State Standards), 63 percent of elementary teachers in self-contained classrooms indicated that social studies had been getting less "instructional time and resources over the past ten years" (or since they had begun teaching, if that was less than 10 years earlier). Fifty percent said that science had been getting less; and 49 percent and 37 percent, respectively, said the same of art and music.¹²

The squeeze on content was even

*Highlights from this survey by Common Core and the Farkas Duffett Research Group, sponsored by the Ford Foundation and the AFT, are found in *Learning Less: Public School Teachers Describe a Narrowing Curriculum* (Washington, DC: Common Core, 2012), available at <http://commoncore.org/maps/documents/reports/cc-learning-less-mar12.pdf>.

Minutes spent *per day* on science and social studies

	1977	2000	2012
K–3 social studies	21	21	16
4–6 social studies	34	33	21
K–3 science	17	23	19
4–6 science	28	31	24

SOURCE: DATA FROM THE NATIONAL SURVEY OF SCIENCE AND MATHEMATICS EDUCATION, REPORTS FOR 1977, 2000, AND 2012. SEE ENDNOTE 11 FOR FULL CITATIONS.

tighter for struggling students. When elementary teachers were asked during what time period struggling students received extra instruction in English language arts or math, 60 percent said that these students were pulled from social studies class, and 55 percent said from science class.¹³ The bottom line: for decades, elementary schools have neglected to build the content foundation that students need and that the Common Core State Standards require for success. This reality is now ingrained in decades of elementary school practice.

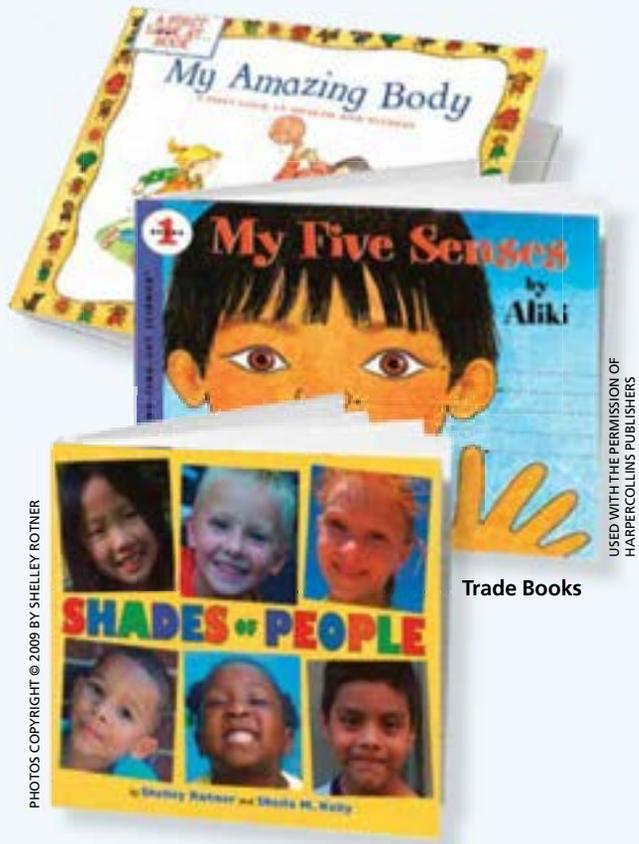
To provide students with the necessary content foundation, the elementary curriculum must be thoroughly revamped so that history/social studies, science, and the arts are taught extensively and coherently. This will require that these subjects get more time in classes of their own and, at least as importantly, that they be heavily integrated into reading textbooks and instruction. Once revamped, curricular tools (curriculum frameworks, course outlines, etc.) and classroom materials that embody the new curriculum must be produced, and time, support, and training must be provided for teachers, so they can make good, smart use of the new materials.

(Endnotes on page 42)

Playful Immersion

Centers and Activities Reinforce Emerging Knowledge and Skills

CKLA Preschool kits come with an array of materials to infuse language-, vocabulary-, and knowledge-building opportunities throughout the various centers and activities typically found in a high-quality preschool setting. The materials include trade books, posters with nursery rhymes and songs, big books, and image collections, as well as detailed teacher guides to show how all of the materials work together. A sample of these materials is shown here; to see the complete program, download it for free at www.coreknowledge.org/ckla-files.



Trade Books

Trade Books

Familiar trade books are read aloud throughout CKLA Preschool. These books reinforce content covered in the domains and familiarize students with the conventions of print and book reading. The books shown to the left are read during the "All About Me" domain to highlight what makes people similar and unique, the parts of the body, and the five senses.

Learning Center Cards

CKLA Preschool includes two types of Learning Center Cards, as shown to the left: reference guides for adults and visual guides with labels for students. In "Doctor's Office," for example, students use their knowledge of body parts and descriptive words from "All About Me" as they engage in dramatic play. Meanwhile, the quick-reference poster for teachers and classroom volunteers reminds adults of key content and vocabulary as they facilitate the Learning Center.



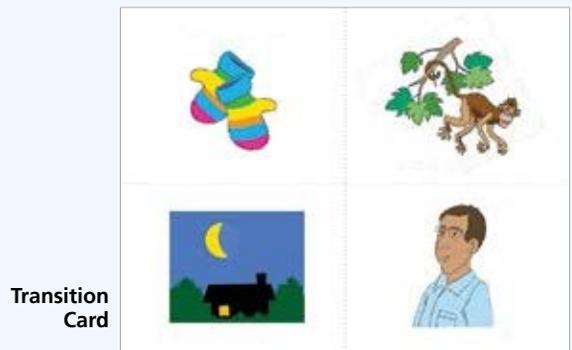
Activity Pages

Activity Pages for use at home and in school provide a springboard for adults to facilitate conversations that reinforce domain-related concepts and vocabulary. Two examples are below. The one on the left, from the "All About Me" domain, asks students to point to illustrated body parts. The one on the right, from the "Animals" domain (which comes about halfway through the school year), reinforces code-related knowledge and skills in a developmentally appropriate way. Teachers have students count the number of syllables in the names of the animals. Students then record the number of syllables in each word by coloring in the corresponding number of empty squares.

Transition Cards

Transition Cards are provided to assist teachers in reviewing and reinforcing concepts and skills as they move students from one activity to another. For example, the Transition Card shown below on the right is designed for reviewing code-related skills taught in small groups. At the beginning of the school year, for example, a teacher might hold up two visually and phonetically distinct capital letters, such as *M* and *P*, and ask, "Matteo, which of these letters is at the beginning of your name?" Later in the year, a teacher might hold up the card shown here and ask what sound is at the beginning of "mittens," "monkey," "moon," and "man."

-C.G. and L.H.



rhyming, sound awareness, and syllable awareness. Together, the content and skills that students learn early in the curriculum provide the foundation for later learning about less familiar, more abstract concepts and ideas.

For example, in the “All About Me” domain, students learn the names of the parts of their own bodies, which is knowledge they refresh and extend during the “Animals” domain taught later in the preschool year. Drawing on their knowledge of their own body parts from the beginning of the year, students studying the “Animals” domain expand their concept of body parts when they learn about animals’ body parts (e.g., beaks, eyes, legs), their functions (e.g., for eating, seeing, walking), and how body parts help classify animals (e.g., birds have beaks). That knowledge is extended yet again in kindergarten during “The Five Senses” domain. Then, in a series of human body domains spread across first through third grades, students learn about the human body’s basic organs and how those organs form systems. (To see some of these materials and connections just described, see the sidebar on pages 26 and 27.)

Similarly, children’s early understandings of animals’ body parts and categories of animals prepare them for later explorations of animals that live in specific habitats (in preschool, kindergarten, and first-grade domains), the three main body parts that characterize insects (second grade), and the difference between vertebrates and invertebrates and how this difference informs animal classification (third grade). This intentional, careful sequencing of content enables students to quickly build complex knowledge and vocabulary. With CKLA, children experience the joy of learning because they see how interesting academic content is—and they are well prepared to comprehend academic texts in later grades.

As the year unfolds, the content of the CKLA Preschool curriculum expands to include literature, science, and history—all still taught through the same developmentally appropriate activities and contexts familiar to teachers and students. The goal is always to build a strong foundation of knowledge so that students can later understand the complex and nuanced relationships that exist within and across content areas.

For example, as preschoolers begin to

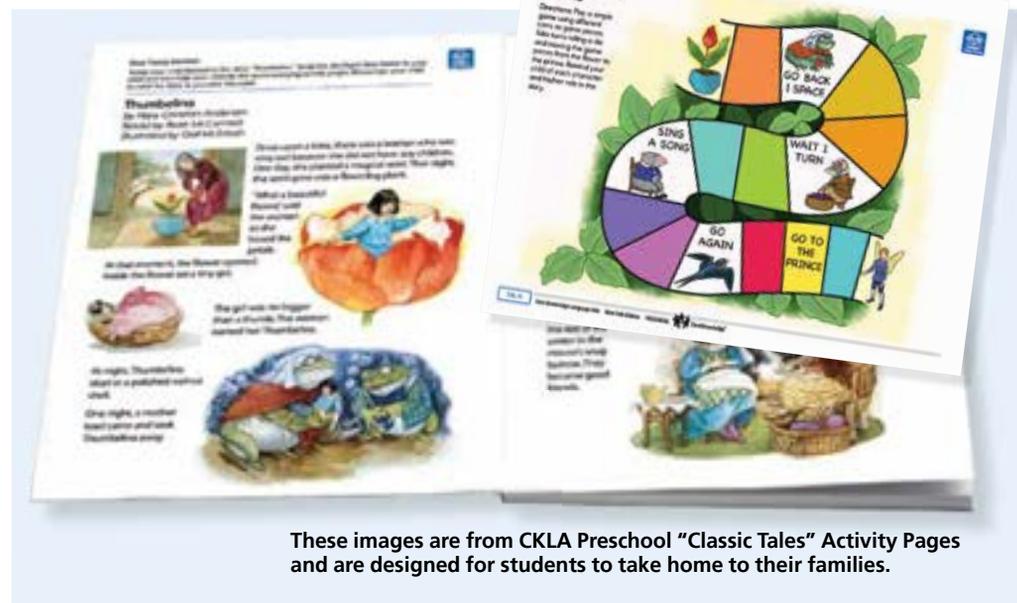
grasp the concept of time and events that occurred in the past, they are introduced to Native Americans as part of the “Important People in American History” domain (see the sidebar on page 27). Through a read-aloud, a rich array of accompanying images, and related activities, children begin to conceptualize the first people to live in what is now the United States. The read-aloud begins with some content that will be familiar, weaving in the unfamiliar:

Long, long ago, long before your mother and father were born, and even long before your grandparents were

Toward the end, the read-aloud becomes more specific: “The Native Americans we have been learning about have a special name. They are a group, or tribe, of Native Americans called the Wampanoag. A long, long time ago, there were many groups, or tribes, of Native Americans living all over the United States.” To deepen understanding, the teacher reviews some of the read-alouds, then shows new images with modern-day information:

Native Americans still live in the United States today. This is a photograph of a Native American boy wear-

The CKLA domains are carefully organized to build on each other within and across grades, giving students opportunities to refine and expand their knowledge and vocabulary over time.



These images are from CKLA Preschool “Classic Tales” Activity Pages and are designed for students to take home to their families.

born, the United States looked very different. ... In that time long, long ago ... there were trees and rivers. There were rocks and mountains. There were wild animals, like deer and birds. The only people who lived here way back then were the Native Americans.

They learn about Native Americans’ diets, activities, and homes, and compare these with their own present-day experiences, noting similarities and differences.

ing clothing that is like the clothing some Native Americans wore long ago. This is a photograph of a Native American family. There is a mom, a dad, and a son.

Of course, preschoolers do not understand *exactly* how or how long ago Native Americans lived prior to European exploration or the series of events that led to modern-day life, but they begin to get a sense of the past and that things were not always the

way they are today. (For more details, including images, see the sidebar below.)

Students, ending the preschool year with some knowledge of the passage of time more generally and the Native Americans more specifically, are well-poised for the kindergarten CKLA domain that examines Native American tribes and traditions in more depth. Going forward, students are equipped for two in-depth third-grade

domains, “Native Americans: Regions and Cultures” and “European Exploration of North America.”

This foundation regarding Native Americans, as well as the rest of the “Important People in American History” domain, is the beginning of a very systematic series of domains on American history. From “Columbus and the Pilgrims” in kindergarten to “Frontier Explorers” in first grade to “Fighting for a Cause” in second grade (and many in between), these domains

grow steadily more detailed and nuanced. Throughout, they aim to be accurate regarding our national achievements and shortcomings, while also celebrating America’s ideals. As E. D. Hirsch Jr.,* the founder of the Core Knowledge Foundation, has explained, this is crucial to studying American history in a way that is patriotic but not nationalistic:⁶

*For more of E. D. Hirsch Jr.’s work, see *American Educator’s* authors index at www.aft.org/newspubs/periodicals/ae/authors2.cfm.

Preschoolers to Presidents

CKLA Builds Knowledge Step by Step

As described in the main article on page 19, CKLA Preschool is carefully designed to build knowledge and vocabulary. Across the year, children participate in interactive read-alouds and enjoy activities grouped in five core domains: “All About Me,” “Families and Communities,” “Animals,” “Plants,” and “Habitats.” The school year intentionally starts with the child, so that everyone has equal learning opportunities (regardless of how much academic preparation they have had at home), and then the domains are sequenced such that each builds on what has been learned. This approach not only facilitates comprehension, it also provides ample occasions for review. In addition, two more domains are interspersed throughout the school year. One is “Classic Tales,” which contains a dozen cherished stories, and the other is “Important People in American History.” Here we take a closer look at “All About Me,” and show how its content is expanded upon in the “Animals” and “Important People in American History” domains.

Dear Family Member:

Today your child learned to read about the parts of the body. Read the poem to your child and talk about the parts of his/her body.

All About Me: Body Parts

Humans have bodies—parts inside and out. Which part of your body do you use to shout?

Shouts begin inside and burst out through your lips—The part of your body that lets you take sips.

What's inside your mouth, past those two slipping lips? Can you wiggle your tongue and make it do flips?

Your nose knows you're eating—it senses the smell. But it also helps keep you living as well.

Your chin, cheeks, and forehead—are parts of your face. With ears on the side in their own special place.

Use your eyes. Look around. Can you spot something red? Did you feel your neck turn as it held up your head?

Put your hands on your hips. Now relax.

Bend your knees. Blow your nose.

Let your arms hang down. Are you strong?

Now, bend your knees, just as much as you can. Knees help your legs move with comfort and ease.

Stand up straight everyone and look down at your feet. How in the world do your legs and feet meet?

You have ankles to help move your feet all around. And heels to keep feet planted safe on the ground.

Exercise is important to keep you healthy and strong. Sit down now and stretch out your legs—long, long, long.

You need all parts together to run, jump, and play. Give a cheer for your body—hip, hip, hooray!

Body parts are an essential component of the knowledge and vocabulary students acquire during the “All About Me” domain. They acquire this knowledge in class, as teachers show images during an active read-aloud in which students point to and move their body parts as they listen to a rhyme. As shown in the CKLA images on the left, the program also offers materials for a related activity students can enjoy at home with their families, reinforcing what they have learned in school.

In the “Animals” domain (see the top images to the right), children draw on what they have learned about their bodies to think about how they are similar to and different from animals. These images are shown as teachers read aloud text that combines content knowledge and rhyme:

You are an animal. This bird is too.
Yes, you are an animal—
But you don't have a pointy beak like some animals do.

You are an animal. This dog is too.
Yes, you are an animal—
But you don't have a furry body like some animals do.

The “Important People in American History” domain is taught in association with national holidays (i.e., Thanksgiving,

Before the American experiment, “nation” was determined by place and birth. ... American patriotism is inherently different. It’s... not based on birth but on a set of Enlightenment ideas, ... ideas of equality, freedom, and toleration. ... *Core Knowledge* ... tries to strike the right balance between loyalty to ideals and historical truth. ... Nationalism defines one group ... against others. It sees differences as inherent and essential. ... It is nativist, and uses

terms that imply contamination and infiltration. That of course goes against the universalism of our founding ideals. The trans-national patriotism of the United States, symbolized by the flag, can accommodate all tribes within a larger conceptual loyalty learned in childhood.

From preschool through third grade, CKLA is carefully designed to plant the seeds for future studies and future respon-

sibilities. By holding firm to the highest goals for education, CKLA demonstrates one way educators can develop the broad academic knowledge, vocabulary, and skills that really do matter most. We would never deprive our children of the oxygen they need to live. Why would we deprive them of the coherent, cumulative, content-rich curriculum they need to become educated citizens and lifelong learners? □

(Endnotes on page 43)



Martin Luther King Jr. Day, Presidents’ Day, and Women’s History Month). The first topic, taught just before Thanksgiving, is Native Americans (a few of the images are shown on the right). To provide context, the first read-aloud begins with basic information, much of which is familiar to preschoolers: “We live in a country called the United States of America. In the United States today, people like to talk on the phone, shop in the grocery store, play on computers, and watch television.”

After adding more familiar context, the text transitions to starting to teach about history: “Long, long ago, long before your mother and father were born, and even long before your grandparents were born, the United States looked very different. There were no phones or computers, there were no cars or tractors, and there were no grocery stores. Not as many people lived here.” As teachers read, they show children what much of the land looked like.

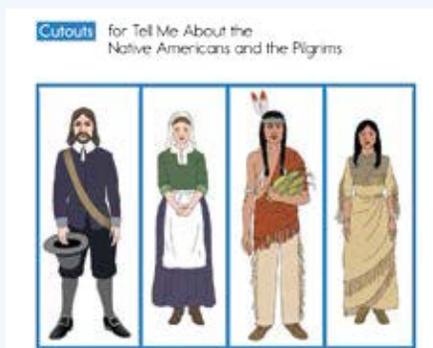
Only after providing this context does the read-aloud go on to describe Native Americans past and present.

Once they have heard read-alouds about Native Americans and the Pilgrims, students are asked to narrate and retell the stories themselves.

In March, for Women’s History Month, the “Important People” domain wraps up with read-alouds and activities on Sonia Sotomayor (shown below). Children may not be ready to understand the Supreme Court, but they can build on what they do know—rules—to start developing an understanding of laws and judges: “Sonia Sotomayor is an important woman in the United States. She knows all about the laws, or rules, that people in the United States have to follow. Her job is to think about what the laws mean and the best way to help people obey those laws.”

Note that this read-aloud also reinforces content from previous domains. It starts with a reminder that we live in the United States. Later, when children learn that Sotomayor “was so good at her job as a judge that President Obama asked her to become a justice on the Supreme Court,” they are also recalling that the president of the United States is currently Barack Obama.

—C.G. and L.H.



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Elementary Curriculum Content

(Continued from page 23)

Endnotes

1. National Commission on Excellence in Education, *A Nation at Risk: The Imperative for Educational Reform* (Washington, DC: U.S. Department of Education, 1983).
2. "Credit Requirements and Exit Exam Requirements for a Standard High School Diploma and the Use of Other High School Completion Credentials, by State: 2011 and 2012," in National Center for Education Statistics, *Digest of Education Statistics*, 2012, table 199; and "State Requirements of High School Graduation, in Carnegie Units: 1980 and 1993," in National Center for Education Statistics, *Digest of Education Statistics*, 1996, table 152.
3. Center on Education Policy (CEP), *State High School Exit Exams: Trends in Test Programs, Alternate Pathways, and Pass Rates* (Washington, DC: CEP, 2009), 16; and Center on Education Policy (CEP), *State High School Tests: Changes in State Policies and the Impact of the College and Career Readiness Movement* (Washington, DC: CEP, 2011), 4.
4. "Average Number of Carnegie Units Earned by Public High School Graduates in Various Subject Fields, by Sex and Race/Ethnicity: Selected Years, 1982 through 2009," in National Center for Education Statistics, *Digest of Education Statistics*, 2011, table 159.
5. Iris R. Weiss, *Report of the 1977 National Survey of Science, Mathematics, and Social Studies Education* (Research Triangle Park, NC: Center for Educational Research and Evaluation, 1978), table 25, www.horizon-research.com/2012nssme/wp-content/uploads/2013/02/1977-Report.pdf.
6. Perhaps this inattention to other subjects was not such a great loss, considering the often trivial quality of the little that was offered. Diane Ravitch reported in 1987 in *The American Scholar* on the state of the elementary social studies curriculum: "[T]here exists a national curriculum in the social studies. Regardless of the state or the school district, children in kindergarten and the first three grades study home, family, neighbors, and the local community." Yet this curriculum "is virtually content-free. ... It contains no mythology, legends, biographies, hero tales, or great events in the life of this nation or any other. It is tot sociology"—known more popularly in the education world as "expanding horizons." Diane Ravitch, "Tot Sociology: Or What Happened to History in the Grade Schools," *American Scholar* 56, no. 3 (Summer 1987): 343–354.
7. William H. Schmidt, Jacqueline Caul, Joe L. Byers, and Margret Buchmann, *Educational Content of Basal Reading Texts: Implications for Comprehension Instruction*, Research Series, no. 131 (East Lansing, MI: Institute for Research on Teaching, Michigan State University, 1983), 10.
8. Schmidt et al., *Educational Content*, 16.
9. For example, see Thomas B. Fordham Institute, *The State of State Science Standards 2012* (Washington, DC: Thomas B. Fordham Institute, 2012); and Sheldon M. Stern and Jeremy A. Stern, *The State of State U.S. History Standards 2011* (Washington, DC: Thomas B. Fordham Institute, 2011).
10. Kate Walsh, "Basal Readers: The Lost Opportunity to Build the Knowledge That Propels Comprehension," *American Educator* 27, no. 1 (Spring 2003): 24.
11. Eric R. Banilower et al., *Report of the 2012 National Survey of Science and Mathematics Education* (Chapel Hill, NC: Horizon Research, 2013), table 4.2, www.horizon-research.com/2012nssme/research-products/reports/technical-report; Iris R. Weiss, Eric R. Banilower, Kelly C. McMahon, and P. Sean Smith, *Report of the 2000 National Survey of Science and Mathematics Education* (Chapel Hill, NC: Horizon Research, 2001), table 4.3, <http://2000survey.horizon-research.com>; and Weiss, *Report of the 1977 National Survey*, table 25.
12. See Common Core, "Learning Less: Public School Teachers Describe a Narrowing Curriculum," complete survey findings, <http://commoncore.org/maps/documents/reports/CommonCore-FDR-CompleteFindings-111208.pdf>. The figures cited here are from cross-tabulations that are not included in the public report or published dataset but were provided by Common Core.
13. It is important to note that 53 percent of these elementary teachers believe that, as a result of the extra attention and resources to English and math instruction, student learning in one or both of these subjects has "improved." These teachers are not saying that the English/math focus is an unmitigated disaster or a waste of time. Rather, they are saying that there are serious tradeoffs. These tradeoffs exist at all grades but are most palpable and extreme at the elementary level, where a single teacher is typically responsible for addressing all the subjects—English and math, plus all the rest. "All the rest" simply does not get a lot of attention in American elementary schools.

Taken for Granted

(Continued from page 27)

Endnotes

1. Grover J. "Russ" Whitehurst, "Don't Forget Curriculum," Brown Center Letters on Education, Brookings Institution, October 2009.
2. Matthew M. Chingos and Grover J. "Russ" Whitehurst, *Choosing Blindly: Instructional Materials, Teacher Effectiveness, and the Common Core* (Washington, DC: Brookings Institution, 2012).

3. Daniel T. Willingham, "Ask the Cognitive Scientist: What Is Developmentally Appropriate Practice?," *American Educator* 32, no. 2 (Summer 2008): 34–39. See also Daniel T. Willingham, "Do We Underestimate Our Youngest Learners?," *RealClearEducation*, March 11, 2014; Deborah Kelemen, Natalie A. Emmons, Rebecca Seston Schillaci, and Patricia A. Ganea, "Young Children Can Be Taught Basic Natural Selection Using a Picture-Storybook Intervention," *Psychological Science* 25 (2014): 893–902; Caren M. Walker and Alison Gopnik, "Toddlers Infer Higher-Order Relational Principles in Causal Learning," *Psychological Science* 25 (2014): 161–169; and Emma Flynn and Robert Siegler, "Measuring Change: Current Trends and Future Directions in Microgenetic Research," *Infant and Child Development* 16 (2007): 135–149.

4. To read more from Jena Peluso, as well as quotes from other teachers using Core Knowledge Language Arts, see www.bit.ly/1mFUHQs.

5. Heidi Cole, "Children Are Curious and Capable—and Teachers Should Be Too," *Core Knowledge Blog* (blog), September 26, 2013, <http://blog.coreknowledge.org/2013/09/26/children-are-curious-and-capable-and-teachers-should-be-too>.

6. E. D. Hirsch Jr., "Sustaining the American Experiment," in *Knowledge at the Core: Don Hirsch, Core Knowledge, and the Future of the Common Core*, ed. Chester E. Finn Jr. and Michael J. Petrilli (Washington, DC: Thomas B. Fordham Institute, 2014), 7–14.

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