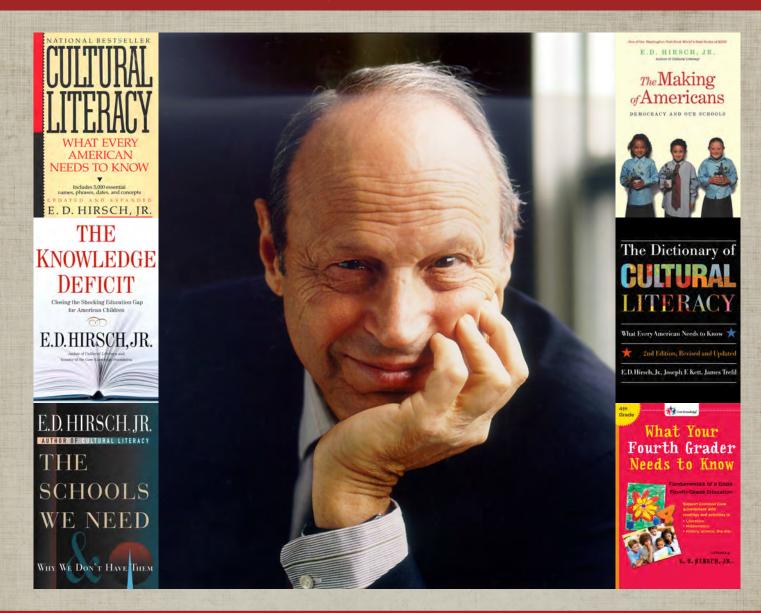
Knowledge at the Core

Don Hirsch, Core Knowledge, and the Future of the Common Core



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Essays by Steve Farkas, Robert Pondiscio, Sol Stern, Ruth Wattenberg, and E. D. Hirsch, Jr.

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Contents

Foreword
Sustaining the American Experiment by E. D. Hirsch, Jr
Romancing the Child: Curing American Education of its Enduring Belief that Learning Is Natural by E. D. Hirsch, Jr
Me, My Sons, and E. D. Hirsch by Sol Stern
Complex Texts Require Complex Knowledge: Will the New English Standards Get the Content Curriculum They Need? by Ruth Wattenberg
There Are No Shortcuts: Mending the Rift between Content Knowledge and Deeper Learning by Robert Pondiscio
Building Teacher Enthusiasm for Core Knowledge by Steve Farkas and the FDR Group
Why I'm for the Common Core by E. D. Hirsch, Jr80

Foreword

This slim volume has large aims. First, it seeks to pay tribute to the three decades of scholarship and service to American education of E. D. (Don) Hirsch, Jr., author of Cultural Literacy (and three other prescient books on education reform) and founder of the Core Knowledge Foundation. Second, it restates the case for a sequential, content-rich curriculum for America's elementary and middle schools. Third, it strives to chart a course for the future, a future in which many more schools embrace Hirsch's Core Knowledge program—or something akin to it—en route to successful attainment of the Common Core State Standards for English language arts/ literacy and mathematics.

Five of the essays that follow were first presented at a December 2013 conference in Washington, D.C., cohosted by the Thomas B. Fordham Institute and the Manhattan Institute. (We have also included two more pieces by Don, "Romancing the Child" and "Why I'm for the Common Core," to flesh out further his ideas and insights.) That gathering of distinguished educators was held at the grandly restored old Carnegie Library on Mt. Vernon Square, a fit setting to pay tribute to Don Hirsch and his seminal contributions to the renewal and rehabilitation of American primarysecondary education. Video from that event, and a terrific documentary about Don and his contributions to American education, are available on our website at edexcellence.net/hirsch.

That day left us hopeful—not a word that often comes to mind amidst the rancorous debates now swirling about education in general and the Common Core in particular. Yet Don himself is, by admission, an unwavering optimist; his enthusiasm is as contagious as his ideas are bracing. So in that spirit, let us make the hopeful case that many more of America's schools are on the precipice of finally embracing those ideas—and thereby boosting their students' chances of achieving the lofty goals that the Common Core standards prescribe.

Rethinking Reading

Let us commence by restating a key Hirsch insight: Teaching knowledge is teaching reading and reading will never be mastered beyond the "decoding" stage without a solid foundation of knowledge. Children cannot be truly literate without knowing about the world—about history, science, art, music, literature, civics, geography, and more. This is not a value statement about what students "should" study; rather, it reflects decades of cognitive science and reading research. Once children learn to decode the words on a page, greater literacy is attained only through greater knowledge. Reading comprehension, and thus learning by reading, depends on knowing something about the content of the passage at hand. If a fifth grader knows a lot about baseball, for example, she will comprehend complex stories about baseball at a high level. But if she doesn't know a lot about the ocean, she will struggle to comprehend anything beyond simple, introductory books about marine life. The only way to help children become strong readers,

regardless of topic, is to equip them with a large store of general knowledge—to help them learn something about everything. And that means implementing a well-designed, sequential, contentrich curriculum, especially in the early grades.

Yet most American primary schools have been marching in the opposite direction: treating reading as a "skill" and pushing off history, science, art, and music "until later." As Ruth Wattenberg, the former editor of the AFT's *American Educator* magazine, explains in her essay, the elementary-school curriculum has been a content-free wasteland for decades, one that grew even more barren in the No Child Left Behind era.

Is it any wonder that while national assessment data have shown decent gains in math achievement in recent years (at least in the early grades), reading outcomes remain dismal? Although some relatively small gains have been made (most likely due to Reading First's spread of phonics-based decoding instruction), high-school scores have been flat for decades.

Bad news. But there's some encouraging news, too. Steve Farkas, one of the smartest (and nicest) public-opinion experts we know, shows in his essay that elementary teachers welcome the notion of a knowledge-rich curriculum. Indeed, they take for granted that it's valuable. They may have been taught otherwise in ed school, but they're not philosophically opposed; most aren't even aware of the ideological battles waged between "progressives" and "traditionalists" within the halls of academe. Building students' knowledge is, to most teachers, simply common sense—and they'd like to do more of it. But first, the misguided progressive ideas shaping schools need to be more widely recognized, as Manhattan Institute scholar Sol Stern writes in his trenchant essay.

Another bit of good news: the single greatest force currently shaping American education—the new Common Core standards, now in place in forty-five states—explicitly endorses Hirsch's ideas and calls for the kind of curriculum that he favors:

"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." —Common Core State Standards

Says Robert Pondiscio, executive director of the advocacy group CitizenshipFirst, those are "the most important fifty-seven words in education reform since the publication of the 'Nation at Risk' report in 1983."

But they are, alas, just words on a page. They're not hard to decode—but how many people grasp their content? How many states and school districts will heed their call?

Though fundamentally an optimist, Don Hirsch does not yet observe much heeding. In his keynote address to the December conference, included here as the essay "Sustaining the American Experiment," he expresses his worry:

District preparations for the Common Core in language arts are looking like district preparations for No Child Left Behind, with lots of how-to processes, under new names, but with no emphasis on systematically imparting facts—which are still considered "mere."

That's precisely what Wattenberg found when she examined textbooks, basal readers, and state websites that are supposedly "Common Core aligned." They do, indeed, pay attention to the skills demanded by the standards, even to the challenge to assign "appropriately complex texts." But in almost every case, they ignore (or never even understand) the charge to put in place a content-rich curriculum so that students can actually read these more challenging texts with understanding.

And while most rank-and-file teachers have no ideological bone to pick with content knowledge, many of their supervisors and administrators still hold fast to the false dichotomies and faulty notions that Hirsch has debunked for years. Just weeks ago, Carmen Fariña, the new chancellor of the New York City Public Schools, displayed her own misunderstanding of the role that knowledge plays in education: "It's always been something I've believed in—we learn facts maybe to take tests, but we learn thinking to get on in life." (As if one can fruitfully think if one doesn't know anything.) In his keynote, Don said, "The effectiveness of the Common Core standards will depend on the adequacy of the ideas held by those who try to put them into effect." Indeed.

The Way Forward

For thirty years, Don Hirsch has tried to capture the attention of America's policymakers, policy thinkers, educators, and philanthropists to persuade them to undertake perhaps the one reform we've never tried: the widespread adoption of a coherent, sequential, content-rich curriculum that intentionally and efficiently builds knowledge and skills. Yet beyond a band of acolytes, a handful of funders, about 1 percent of schools, and some thousands of home schoolers, his arguments have mostly fallen on deaf or uncomprehending ears.

What might change the outcome over the next thirty years? Here's a to-do list:

1. Continue to build the evidentiary base. Don has long made a compelling, research-based, and scientifically sound argument for content knowledge in the early grades, and top-notch cognitive scientists agree with him. While a small pilot study was conducted in New York City to test and improve an early version of the program, Core Knowledge Language Arts

- (CKLA) has not yet been subjected to a rigorous evaluation (it is just now being completed and made available to all). We need more evidence that schools that use CKLA—or other content-rich curriculums—do better, particularly in reading.
- 2. Develop an open-source version of the Core Knowledge Language Arts program for preschool through grade 5. (Preschool through third grade has already been developed and made available for free—thanks to a variety of funders, including a Race to the Top grant from the New York Department of Education.) It's one thing to promote the "idea" of content knowledge; teachers appear receptive. But to make it come alive, there needs to be an actual "program" or "curriculum" that schools can easily acquire and install, whether via purchase or for free. Core Knowledge Language Arts already exists, and it's terrific, but it doesn't have to be the only such curriculum. Schools would benefit from having quality choices in this realm.
- 3. Attract philanthropic support. Many donors are looking for a way to make a significant impact at scale, and many are generously supporting Common Core implementation. To date, however, that has seldom included the development and dissemination of curricular materials that are not just "aligned" with the Common Core but that also embody the spirit of the standards' call for building knowledge through a content-rich curriculum. There is enormous potential to achieve tremendous leverage via curriculum reform, as scholars such as Russ Whitehurst of the Brookings Institution have argued. Making high-quality books and professional development available to schools—including but not limited to Core Knowledge Language Arts—could transform America's elementary schools, and without the controversy that follows most of today's reform efforts.
- 4. Forcefully advocate knowledge. We like to think that Ms. Fariña is an anomaly and that most superintendents, principals, and teachers would be open to implementing a contentrich curriculum if presented with the cognitive science demonstrating the importance of broad knowledge—and with accessible, usable options. Someone might fund a campaign to "Rethink Reading" that would target these key educators via conferences, social networks, advertising, etc.. Common Core funders would be smart to support such efforts, both to boost the odds that these standards can actually be met and to demonstrate—especially to conservative critics—that the Common Core is wholly compatible with, perhaps even dependent upon, Core Knowledge.

Are you in the position to help with any of those four objectives? If so, let's talk.

Meanwhile, please read and enjoy the wonderful essays that follow.

Sincerely,

Chester E. Finn, Jr. and Michael J. Petrilli

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Sustaining the American Experiment

by E. D. Hirsch, Jr.

Over the years, it was not a lack of accurate ideas that has kept essential knowledge from reaching more children. It has been the difficulty of *changing* ideas that are held with an almost religious fervor by far too many influential people in the field of education.

The central insight of Core Knowledge is the scientific finding that language comprehension requires a mountain of unseen shared knowledge that is not spoken—a kind of dark energy that governs verbal comprehension. The schools' neglect of this hidden knowledge has depressed language competence and perpetuated inequality. Those are not Hirsch-created ideas. They emerge from cognitive science and research into reading and literacy.

I'll return to that research and its role, and to my main theme, the teaching of civics. First, though, allow me to digress with a few reminiscences about how we came to this gathering.

Picture a young man who had the soul of a hard scientist but who was undisciplined in college and drifting, and at two critical times of decision drifted first into literature, and then into education. Nothing better epitomizes the contradiction between my hard-science temperament and the soft métiers that I found myself in than a letter I received right after the book Cultural Literacy came out in 1987. It was from a very distinguished literary friend. He wrote something that has stuck in my memory. "Dear Don, you quote Plato in your book, saying 'let us follow the argument whither it leads.' But you don't want to do that if it's going to lead to a place where you know you don't want to go."

That encapsulates what C. P. Snow called "the two cultures": the difference between the hard sciences, where the testing of hypotheses and the following of logical inferences is the norm, and a great deal of work in literature and education, where the answer is known before you start because you already know that you are going to support a moral, aesthetic, or ideological stance of some kind.

Since boyhood, that kind of thinking has gone against my grain. As a boy, I liked those long syllogisms by Lewis Carroll where you can't guess where his whimsical premises are going to lead until you have accurately followed the logical train.

The other pattern I see looking back was an instinct to restore balance. I very consciously pursued that ideal in my teaching—for instance, in my favorite course, the history of literary theory, which I taught for nearly 50 years. Into the 1960's, my students all came to the class as Aristotelians who

believed that the mark of quality in literature was formal excellence. So my instinct was to urge Plato's counter argument that the mark of excellence was whether the work was good for you and your society. In the 1970s and 80s, however, things changed. My students came in as Platonists insisting that literature must be socially beneficial. With them I argued for Aristotle. In the end, I always tried to get their support for theorists who took the middle way, like Horace and Philip Sidney, who said literature is good when it is both well-made and good for you and your society.

I brought that balancing instinct into my scholarship on the romantics and interpretation theory, and eventually into education. I thought that New Criticism in literature and Progressivism in education shared the same overemphasis on the idea that students need how-to skills rather than relevant factual knowledge. New Critics disparaged historical and biographical facts and claimed that the how-to approach would unlock literature qua literature. Progressive education also disparaged "mere" facts and claimed that what students needed was critical thinking skills, then 20th century skills—and now 21st century skills. I was a dissenter not because I enjoyed courting controversy, but because I thought there needed to be a counter-balance to traditions that had become one sided—and thus inaccurate and ineffective. But notice the difference between what happened to the New Criticism and to Progressivism. New Criticism had to make its way in the rough and tumble of the arts and sciences, and it is no longer the dominant force in literary study. But Progressivism is still safely enthroned in its own domain. Over in arts and sciences, you can get a full professorship if you kill your intellectual fathers. But try father-killing in an education school, and you will be expelled by the intellectual monopoly that prevails there. The immovable orthodoxy that reigns in our teacher training institutions is very bad news for the nation—chiefly because the ideas are scientifically inadequate, and yield poor results.

In the long view, that system of ideas, that "thoughtworld," is the gravest problem in American K-12 education. Ideas determine practices. No matter what structural reforms we put in place, or what standards we impose, the results will remain stagnant so long as the ruling ideas of educators stay the same. Logic may yield right answers, and new policies may be enlightened, but they won't prevail until teachers and administrators change their ideas. The effectiveness of the Common Core standards will depend on the adequacy of the ideas held by those who try to put them into effect. Today, district preparations for the Common Core in language arts resemble district preparations for No Child Left Behind: lots of how-to processes under new names, but with little or no emphasis on systematically imparting facts—which are still considered "mere."

One way to counter this trend would be to create curriculum-based reading tests—that is, grade-by-grade tests with reading passages taken from the topics of the grade-by-grade school curriculum—the only truly fair kinds of reading tests in the early grades. If I were a billionaire who wasn't under the curriculum-neutral constraints governing the two Common Core assessment consortia, I'd simply have such tests made, and give them away—and let it be known far and wide that if they were actually put into use verbal scores would rise significantly. Such tests might gradually change ideas, because their effects would be unmistakable.

In the end, nothing much is going to improve without a change of ideas about the importance of a knowledge-based curriculum, which is the only true skills curriculum. We need an army of Core-Knowledge Billy Grahams able to induce mass conversion experiences all over the country.

Now let me turn to the relationship of civic knowledge to the well-being of the nation. This topic could be seen as another example of an instinct to restore balance. The NAEP record is startling. Civic knowledge as learned in school has declined precipitously in the past 50 years. That is one data point that even staunch defenders of the status quo concede.

What went wrong? After the Second World War, with the United States by far the most powerful and influential nation in the world, complacency reigned. America was on top. Few emphasized the educational tradition that the schools are needed to help unify and sustain this artificially patched-together nation. Along with this complacency, many began to grow disillusioned with U. S. policies—with militarism, Watergate, the Vietnam War. All over the country, in humanities departments and education schools, there developed an insistent criticism of the United States, particularly during the Vietnam period when it seemed far more important to criticize than to praise and sustain.

But to our earliest thinkers about education—like Benjamin Rush and Noah Webster—the inherent fragility of what they termed the American "experiment," was ever present in their minds. They considered the U.S. an experiment in two respects. It was to be the first large republic made up of smaller republics—something new to human history. George Washington and others called it "our empire." The stripes on the flag, and the motto "Out of Many One" expressed that conception. But the early thinkers also considered the United States to be an experiment in another respect: an artificially created nation based on ideas, and therefore sustainable only by schools that promulgated those ideas. People were to be bound together not by common traditions from a mythic past, but by common ideals about freedom, equality, democracy, and law, which could only be instilled by education.

Recognizing this, George Washington bequeathed a portion of his estate to education, stating in his will that his purpose was to help counteract the country's fragmentation into region and faction, and to foster loyalty to the larger community. In 1786, Benjamin Rush stated that the aim of American schools was to create "Republican machines." He was being urbane and arch in that metaphor, which he used to stress the need for a common indoctrination in Enlightenment ideals, with everyone taught to pull together to make the republic work. These founding thinkers understood that continual nation-making was needed to sustain this new type of post-Enlightenment nation.

A few decades later, despite the national stain of slavery and racism, the school ideal expanded to include what Randolph Bourne termed "trans-national America,"—a union not just of many states but also of many ethnicities and races. This was a big change from earlier days when Benjamin Franklin famously disliked having even Germans in Pennsylvania—with their odd language and customs messing up the neat commonality of the commonwealth.

By the early 19th century, the ideal of the common school was becoming fully realized, along with the ideal of the melting pot. All persons, no matter their color or national origin, were to be Americanized into feeling patriotic sentiment and sharing ideals of equality and democracy. I'll quote briefly from a speech you may recognize from 1838: Let it "be breathed by every American mother, to the lisping babe, that prattles on her lap; let it be taught in schools, in seminaries, and in colleges; let it be written in Primers, spelling books, and in Almanacs; let it be preached from the pulpit, proclaimed in legislative halls, and enforced in courts of justice. And, in short, let it become the political religion of the nation; and let the old and the young, the rich and the poor, the grave and the gay, of all sexes and tongues, and colors and conditions, sacrifice unceasingly upon its altars."

That was Abraham Lincoln, at the age of 28, and note the key phrase "all sexes and tongues, and colors and conditions." All were to be Americanized—not just the émigrés from Great Britain. That Universalist ideal was the central theme of the early common-school movement, as can be seen clearly in an 1848 account of the history of the common school in New York State, one of the most thrilling books I've ever read and one that I quote at length in my book, *The Making of* Americans. The making of American patriots continued to be a self-conscious aim of schools and schoolbooks well into the 1930s—to our good fortune. The common-school idea helped create the United States, and helped sustain it as a national community. It made the fragile experiment largely a success.

Now to the present, and an anecdote that illustrates the challenges we now face. A couple of months ago, I got a desperate email from my granddaughter Cleo, a wonderful do-gooder, newly graduated from college. She is teaching in a public school in the Bronx, where she is responsible for teaching the American Revolution to 7th graders. She had no guidance from New York

City or State or her school about just what to teach her students or what she could assume they already knew. I had some Core Knowledge teacher handbooks sent to her, and a few days later, I mentioned the incident in a blog, pointing out that teachers have an almost impossible job when they don't know what their students might be expected to know by way of background. I got a response from a New York teacher who said that Cleo could find out what her students already knew if she went to the official New York state website for American history standards. So I went to that site. Since American history wasn't taught at all in grade 6, I went to grade 5, and this is what I found. Please note the recurrence of the word "different."

Different ethnic, national, and religious groups, including Native American Indians, have contributed to the cultural diversity of North American nations and regions by sharing their customs, traditions, beliefs, ideas, and languages.

Different people living in the Western Hemisphere may view the same event or issue from different perspectives.

The migration of groups of people in the United States, Canada, and Latin America has led to cultural diffusion because people carry their ideas and ways of life with them when they move from place to place. Key turning points and events in the histories of Canada, Latin America, and the United States can be organized into different historical time periods. For example, key turning points might include: 18th-century exploration and encounter; 19th-century westward migration and expansion, 20th-century population movement from rural to suburban areas. Important historic figures and groups have made significant contributions to the development of Canada, Latin America, and the United States. Industrial growth and development and urbanization have had important impacts on Canada, Latin America, and the United States.

That's the so-called "content guide," which, as you see, is quite unclear whether emphasis should fall on Canada, Latin America, or the United States. The one thing that is clear from these standards is an attitude: Let's not be nationalistic. Let's not place any special focus on the United States—which would be overly narrow. Rather, let's learn unspecified things about the nations of two entire continents and their diversity. Thus, today, in New York State, the great cradle of the common school, the one definite thing to be learned is a trans-patriotic attitude: "Let's not assume that the USA deserves more emphasis than anyplace else in the western hemisphere." In this approach, New York is not unique. Similar guides are to be found in other states, residues of doctrines that are being promulgated in courses on the Foundations of Education under the reign of the "politics of difference," "multiculturalism," and the "New Left."

In my book, the *Making of Americans*, I quoted with admiration my late friend Richard Rorty who made a distinction between my kind of liberal, the "Old Left", exemplified by Dick himself, and also by the late Albert Shanker. Their view contrasts profoundly with the Academic Left, which, though it shares some causes with the Old Left such as racial equality, the women's movement and gay rights, was—and is—also infected with political correctness in language, snobbish jargon, and anti-national attitudes. In 1994, Rorty wrote a memorable op-ed for the New York Times which foresaw with great prescience and eloquence how those attitudes would foreshadow Cleo's problem:

Most of us...still identify with our country. We take pride in being citizens of a self-invented, self-reforming, enduring constitutional democracy. We think of the United States as having glorious—if tarnished—national traditions. Many of the exceptions to this rule are found in academic departments that have become sanctuaries for left-wing political views. I am glad there are such sanctuaries, even though I wish we had a left more broadly based, less selfinvolved and less jargon-ridden than our present one....[Their] focus on marginalized groups will, in the long run, help to make our country much more decent, more tolerant and more civilized. But there is a problem with this left: it is unpatriotic. In the name of "the politics of difference," it refuses to rejoice in the country it inhabits. It repudiates the idea of a national identity, and the emotion of national pride.... The chairman of the National Endowment of the Humanities, recently proposed...town meetings to "explore the meaning of American identity." [This was criticized as] ..."the gentlemanly face of nationalism," and [as supporting] "the evil of a shared national identity." It is important to insist that a sense of shared national identity is not an evil. It is an absolutely essential component of citizenship, of any attempt to take our country and its problems seriously. There is no incompatibility between respect for cultural differences and American patriotism....A nation cannot reform itself unless it takes pride in itself—unless it has an identity, rejoices in it, reflects upon it and tries to live up to it. Such pride sometimes takes the form of arrogant, bellicose nationalism. But it often takes the form of a yearning to live up to the nation's professed ideals. If we fail in such identification, we fail in national hope. If we fail in national hope, we shall no longer even try to change our ways. If in the interests of ideological purity, or out of the need to stay as angry as possible, the academic left insists on a "politics of difference," it will become increasingly isolated and ineffective. An unpatriotic left has never achieved anything. A left that refuses to take pride in its country will have no impact on that country's politics, and will eventually become an object of contempt.

Rorty's prophecy has proved true. Over the past three decades, the Academic and Cultural Left has dominated in our education schools, especially in "foundations of education" courses, where nascent teachers are trained to scorn traditional American boosterism. This has caused a great deal of harm. Dick Rorty's brave piece caused outrage among his colleagues, but it pointed to a key subtlety that we educators need to keep clearly in mind: the difference between nationalism and patriotism.

This difference is particularly American. Before the American experiment, "nation" was determined by place and birth. It had a tribal overtone. The attitude was well summarized in Fichte's Addresses to the German Nation of 1807. He reassured his fellow citizens, who had just suffered a military defeat by Napoleon, that the German Teutons were nonetheless really much better than the French Gauls.

American patriotism is inherently different. It's not based on birth but on a set of Enlightenment ideas. If Americans claim superiority, it's certainly not because they are descended from Teutons or even Anglo Saxons, but because they have created a union based on ideas of equality, freedom, and toleration. A vigorous and successful United States could not have evolved if our schools had not deliberately sustained those ideals through national myths about courageous heroes who fought for those principles.

So we are left with Cleo's dilemma. What shall I teach my students? Let's grant to the Cultural Left its positive accomplishments and the validity of its impulses. Let's also concede that we needn't look back to the far-from-perfect 19th century for guidance, but need to look forward. But let's not smugly remove one national mythic hero until we replace him or her with another who equally well promotes courage, democratic ideals, unity, and national pride. Shared heroes and common ideals are absolutely needed for the schools of the United States, no less today than in the past. To sustain heroes, it's not necessary to tell lies, because there have been heroes. If you look for an example of how to do it, the *Core Knowledge Sequence* tries to strike the right balance between loyalty to ideals and historical truth. But that's a rare example. Our teachers' priorities have been distorted for several decades by fashionable and superficial theories, which claim moral superiority to a supposedly evil nationalism.

If I were asked what books teachers-in-training could usefully be exposed to, it would not be the fashionable anti-national, self-righteous ones being assigned today—those by Friere, Macedo, and other gurus. It would be the poetic musings of Benedict Anderson in his fine book *Imagined* Communities. That phrase exactly defines what the US is—an imagined community—imagined by the founders, and sustained and idealized by early textbook makers and by the creators of the common school.

In reading Benedict Anderson, teachers would encounter an eloquent distinction between patriotism and nationalism. Nationalism defines one group over against others. It sees differences as inherent and essential. (Unfortunately, so does a lot of so-called "multiculturalism.") 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.

In closing, let me sum up what the great patriots of the common-school movement understood: that only an imagined community can embrace a country this big. The common-school ideal doesn't need to look backwards, but it does need to be sustained—and reformulated for a new era. The themes of the Declaration hold in all centuries, as Lincoln insisted at the end of his prepresidential speech in Milwaukee. Patriotism, says Benedict Anderson, "does not differ...from other affections in which there is always an element of fond imagining." The affections learned in childhood are "parted with only at the grave, pasts are restored, fellowships are imagined, and futures dreamed." The American experiment will cease to thrive when those imaginings and loyalties cease to be nurtured in our schools.

This piece was adapted from a speech given by E. D. Hirsch, Jr. on December 4, 2013, at a *tribute event* honoring his contributions to the field of education.

Romancing the Child: Curing American Education of its Enduring Belief that Learning Is Natural

by E. D. Hirsch, Jr.

The Disney Corporation's Celebration School sounded like yet another fairy tale from the creators of the Little Mermaid and the Lion King. It was supposed to be the ideal school, set in Disney's newly created Florida community, Celebration. According to the New York Times, the school was to follow the "most advanced" progressive educational methods. In fact these "new" methods were rebottled versions of earlier progressive schemes going back at least 100 years—as Diane Ravitch documented in her book *Left Back*—schemes such as multi-aged groups in which each child goes at his or her own pace; individualized assessments instead of objective tests; teachers as coaches rather than sages; projects instead of textbooks.

Such methods, although they have been in use for decades, have rarely worked well. The Celebration School was no exception. As the Times headline put it, there was "Trouble at the Happiest School on Earth." The Times article began, "The start of the school year here is just a few days away, so it was no surprise that there was a line of parents at the Celebration School office the other day. But the reason for the line was: they were queuing up to withdraw their children." Parents said they were dissatisfied with the lack of clear academic goals and measures of achievement, as well as with the lack of order and structure that accompanied the progressive methods.

The Celebration School's failure was wholly predictable. In the 1980s, the distinguished sociologist James Coleman conducted carefully controlled, large-sample research that demonstrated the ineffectiveness of progressive methods in raising general academic achievement and in closing the achievement gap between advantaged and disadvantaged students. Coleman found that Catholic schools achieve more educational equity than public schools because they follow a rich and demanding curriculum; provide a structured, orderly environment; offer lots of explicit instruction, including drill and practice; and expect every child to reach minimal goals in each subject by the end of the year. All of this stands in stark contrast to the progressive ideals of unstructured, implicit teaching and "individually tailored" instruction that now predominate in public schools. As a result, disadvantaged children prosper academically in Catholic schools, and the schools narrow the gaps among races and social classes. When criticized for condemning public schools, Coleman pointed out that the very same democratic results were being achieved by the few public schools that were also defying progressivist doctrine. Along with large-scale international comparisons, Coleman's work is the most reliable observational data that we have regarding the validity of progressive ideas, and it has never been refuted.

The evidence against progressive educational theories mounts still higher if you combine Coleman's data with the research on so-called "effective schools." Effective schools are characterized by explicit, agreed-upon academic goals for all children; a strong focus on academics; order and discipline in the classroom; maximum time on learning tasks; and frequent evaluations of student performance—all principles repudiated by the Disney school and also by many "new" education reforms. In fact, the progressive way of running a school is essentially the opposite of what the effective-schools research has taught us. A review of this research by the late, great scholar Jeanne Chall may be found in *The Academic Achievement Challenge: What Really* Works in the Classroom? (2000).

One would think that the failures of progressivism might induce more skepticism among both its adherents and the public. Yet the unempirical theories of progressive educators—generally dressed up with empirical claims—remain highly influential among teachers, administrators, and distinguished professors. Their unspoken assumptions work a hidden sway over the American public as well. For example, test-bashing wouldn't be so popular if progressive theories about education didn't resonate somehow with widespread American beliefs about children and learning. One can understand why progressives should want to bash tests, when their methods consistently fail to improve test scores. But why should others accept the disparagement of, say, reading tests, which are among the most valid and reliable of existing instruments?

In my mind, progressive educational ideas have proved so seductive because their appeal lies not in their practical effects but in their links to romanticism, the 19th-century philosophical movement, so influential in American culture, that elevated all that is natural and disparaged all that is artificial. The progressives applied this romantic principle to education by positing that education should be a natural process of growth that flows from the child's natural instincts and interests. The word "nature" in the romantic tradition connotes the sense of a direct connection with the holy, lending the tenets of progressivism all the weight of religious conviction. We know in advance, in our bones, that what is natural must be better than what is artificial. This revelation is the absolute truth against which experience itself must be measured, and any failure of educational practice must be due to faulty implementation of progressive principles or faulty interpretation of educational results. Thus the results of mere reading tests must not be taken at face value, because such blunt instruments cannot hope to measure the true effects of education. The fundamental beliefs of progressivism are impervious to unfavorable data because its philosophical parent, romanticism, is a kind of secular theology that, like all religions, is inherently resistant to data. A religious believer scorns mere "evidences."

The Chasm Between

There are many disputes within the education field, but none so vituperative as the reading and math wars—the battles over how best to teach children to read and to solve arithmetic problems. These aren't just disputes over instructional techniques; they are expressions of two distinct and opposing understandings of children's nature and how children learn. The two sides are best viewed as expressions of romantic versus classical orientations to education. For instance, the "whole language," progressive approach to teaching children how to read is romantic in impulse. It equates the natural process of learning an oral first language with the very unnatural process of learning alphabetic writing. The emotive weight in progressivist ideas is on naturalness. The natural is spiritually nourishing; the artificial, deadening. In the 1920s, William Kilpatrick and other romantic progressivists were already advocating the "whole language" method for many of the same reasons advanced today.

The classical approach, by contrast, declines to assume that the natural method is always the best method. In teaching reading, the classicist is quite willing to accept linguistic scholarship that discloses that the alphabet is an artificial device for encoding the sounds of language. Learn the forty-odd sounds of the English language and their corresponding letter combinations, and you can sound out almost any word. Yet adherents of "whole language" regard phonics as an unnatural approach that, by divorcing sounds and letters from meaning and context, fails to give children a real appreciation for reading.

The progressivist believes that it is better to study math and science through real-world, handson, natural methods than through the deadening modes of conceptual and verbal learning, or the repetitive practicing of math algorithms, even if those "old fashioned" methods are successful. The classicist is willing to accept the verdict of scholars that the artificial symbols and algorithms of mathematics are the very sources of its power. Math is a powerful instrument precisely because it is unnatural. It enables the mind to manipulate symbols in ways that transcend the direct natural reckoning abilities of the mind. Natural, real-world intuitions are helpful in math, but there should be no facile opposition between terms like "understanding," "hands-on," and "real-world applications" and terms like "rote learning" and "drill and kill." What is being killed in memorizing the multiplication table? The progressivist says: children's joy in learning, their intrinsic interest, and their deep understanding.

The romantic poet William Wordsworth said, "We murder to dissect"; the progressivist says that phonemics and place value should not be dissected in isolation from their natural use, nor imposed before the child is naturally ready. Instead of explicit, analytical instruction, the romantic wants implicit, natural instruction through projects and discovery. This explains the romantic preference for "integrated learning" and "developmental appropriateness." Education that places subject matter in its natural setting and presents it in a natural way is superior to the artificial analysis and abstractions of language. Hands-on learning is superior to verbal learning. Realworld applications of mathematics provide a truer understanding of math than empty mastery of formal relationships.

Natural Supernaturalism

The religious character of progressivism is rarely noted because it is not an overtly religious system of belief. Romanticism is a secularized expression of religious faith. In a justly famous essay, T. E. Hulme defined romanticism as "spilt religion." Romanticism, he said, redirects religious emotions from a transcendent God to the natural divinity of this world. Transcendent feelings are transferred to everyday experience—like treacle spilt all over the table, as Hulme put it. M. H. Abrams offered a more sympathetic definition of this tendency to fuse the secular and religious by entitling his fine book on romanticism *Natural Supernaturalism*. The natural is supernatural. Logically speaking, it's a contradiction, but it captures the romantic's faith that a divine breath infuses natural human beings and the natural world.

In emotional terms, romanticism is an affirmation of this world—a refusal to deprecate this life in favor of pie in the sky. In theological terms, this sentiment is called "pantheism"—the faith that God inhabits all reality. Transcendent religions like Christianity, Islam, and Hinduism see this world as defective, and consider the romantic divinizing of nature to be a heresy. But for the romantic, the words "nature" and "natural" take the place of the word "God" and give nature the emotional ultimacy that attaches to divinity. As Wordsworth said,

> One impulse from a vernal wood May teach you more of man, Of moral evil and of good, Than all the sages can —The Tables Turned (1798)

The romantic conceives of education as a process of natural growth. Botanical metaphors are so pervasive in American educational literature that we take them for granted. The teacher, like a gardener, should be a watchful guide on the side, not a sage on the stage. (The word "kindergarten"—literally "children-garden"—was invented by the romantics.) It was the romantics who began mistranslating the Latin word educare (ee-duh-kar'e), the Latin root word for education, as "to lead out" or "to unfold," confusing it with educere (eh-diu'ke-re), which does mean "to lead out." It was a convenient mistake that fit in nicely with the theme of natural development, since the word "development" itself means "unfolding." But educare actually means "to bring up" and "instruct." It implies deliberate training according to social and cultural norms, in contrast to words like "growth" and "development," which imply that education is the unfolding of human nature, analogous to a seed growing into a plant.

The same religious sentiment that animates the romantics' fondness for nature underlies their celebration of individuality and diversity. According to the romantics, the individual soul partakes of God's nature. Praise for diversity as being superior to uniformity originates in the pantheist's sense of the plenitude of God's creation. "Nature's holy plan," as Wordsworth put it, unfolds itself with the greatest possible variety. To impose uniform standards on the individuality of children is to thwart their fulfillment and to pervert the design of Providence. Education should be childcentered; motivation to learn should be stimulated through the child's inherent interest in a subject, not through artificial rewards and punishments.

Whether these educational tenets can withstand empirical examination is irrelevant. Their validation comes from knowing in advance, with certainty, that the natural is superior to the artificial.

A More Complicated Nature

Plato and Aristotle based their ideas about education, ethics, and politics on the concept of nature, just as the romantics did. A classicist knows that any attempt to thwart human nature is bound to fail. But the classicist does not assume that a providential design guarantees that relying on our individual natural impulses will always yield positive outcomes. On the contrary, Aristotle argued that human nature is a battleground of contradictory impulses and appetites. Selfishness is in conflict with altruism; the fulfillment of one appetite is in conflict with the fulfillment of others. Follow nature, yes, but which nature and to what degree?

Aristotle's famous solution to this problem was to optimize human fulfillment by balancing the satisfactions of all the human appetites—from food and sex to the disinterested contemplation of truth—keeping society's need for civility and security in mind as well. This optimizing of conflicting impulses required the principle of moderation, the golden mean, not because moderation was a good in itself, but because, in a secular view of conflicted human nature, this was the most likely route to social peace and individual happiness. The romantic poet William Blake countered, "The road of excess leads to the palace of wisdom." But again, that would be true only if a providential nature guaranteed a happy outcome. Absent such faith in the hidden design of natural providence, the mode of human life most in accord with nature must be, according to Aristotle, a via media that is artificially constructed. By this classical logic, the optimally natural must be self-consciously artificial.

Renewed interest in evolutionary psychology has given the classic-romantic debate new currency. Darwinian moral philosophers such as George Williams reject the notion that evolution should be a direct guide to ethics or to education. On the contrary, evolutionary psychology reintroduces in its own way the classical idea that there are inherent conflicts in human nature—both selfishness and altruism, both a desire to possess one's neighbor's spouse and a desire to get along with one's neighbor. The adjudication of these contradictory impulses requires an anti-natural construct like the Ten Commandments. Similarly, from the standpoint of evolution, most of the

learning required by modern schooling is not natural at all. Industrial and postindustrial life, very recent phenomena in evolutionary terms, require kinds of learning that are constructed artificially and sometimes arduously on the natural of the mind—a point that has been made very effectively and in detail by David Geary, a research psychologist specializing in children's learning of mathematics at the University of Missouri. Geary makes a useful distinction between primary and secondary learnings, with most school learnings, such as the base-ten system and the alphabetic principle, being the "unnatural," secondary type.

The very idea that skills as artificial and difficult as reading, writing, and arithmetic can be made natural for everyone is an illusion that has flourished in the peaceful, prosperous United States. The old codger Max Rafferty, an outspoken state superintendent of education in California, once denounced the progressive school Summerhill, saying:

Rousseau spawned a frenetic theory of education which after two centuries of spasmodic laboring brought forth...Summerhill....The child is a Noble Savage, needing only to be let alone in order to insure his intellectual salvation... Twaddle, Schooling is not a natural process at all. It's highly artificial. No boy in his right mind ever wanted to study multiplication tables and historical dates when he could be out hunting rabbits or climbing trees. In the days when hunting and climbing contributed to the survival of Homo sapiens, there was some sense in letting the kids do what comes naturally, but when man's future began to hang upon the systematic mastery of orderly subject matter, the primordial, happy-go-lucky, laissez faire kind of learning had to go.

The romantic versus classic debate extends beyond the reading and math wars to the domain of moral education. The romantic tradition holds that morality (like everything else) comes naturally. The child, by being immersed in real-life situations and being exposed to good role models, comes to understand the need for sharing, kindness, honesty, diligence, loyalty, courage, and other virtues. Wordsworth's account of his own education, which he called "Growth of a Poet's Mind," contained a section entitled, "Love of Nature Leading to Love of Mankind."

The romantic wishes to encourage the basic goodness of the natural soul, unspoiled by habit, custom, and convention. The principal means for such encouragement is to develop the child's creativity and imagination—two words that gained currency in the romantic movement. Before the romantics, using the term "creativity" for human productions was considered impious. But that ended when the human soul was conceived as inherently godly. Moral education and the development of creativity and imagination went hand in hand. In the 19th and early 20th centuries, textbooks like the McGuffey Readers strongly emphasized moral instruction and factual knowledge. With the rise of progressive ideas, however, the subject matter of language arts in the early grades began to focus on fairy tales and poetry. The imparting of explicit moral

instruction gave way to the development of creativity and imagination. Imagination, the romantic poet and essayist Samuel Taylor Coleridge said, "brings the whole soul of man into activity." When we exercise our imaginations, we connect with our divine nature, develop our moral sensibilities.

Romance or Justice?

One cannot hope to argue against a religious faith that is impervious to refutation. But there can be hope for change when that religious faith is secular and pertains to the world itself. When the early romantics lived long enough to experience the disappointments of life, they abandoned their romanticism. This happened to Blake, Wordsworth, and Coleridge. One of Wordsworth's most moving works was the late poem, "Elegiac Stanzas," which bade farewell to his faith in nature. Similar farewells to illusion were penned by the other romantics. There is a potential instability in *natural* supernaturalism. Romantic religion is vulnerable because it is a religion of this world. If one's hopes and faith are pinned on the here and now, on the faith that reading, arithmetic, and morals will develop naturally out of human nature, then that faith may gradually decline when this world continually drips its disappointments.

So far, progressivism has proved somewhat invulnerable to its failures. But its walls are beginning to crumble, and none too soon. Only when widespread doubt is cast on public education's endemic romanticism will we begin to see widespread improvements in achievement. Everyone grants that schooling must start from what is natural. But schooling cannot effectively stay mired there. With as much certainty as these things can be known, we know that analytical and explicit instruction works better than inductive, implicit instruction for most school learning. To be analytical and explicit in instruction is also to be artificial. Also, it is to be skeptical that children will naturally construct for themselves either knowledge or goodness.

The romantic thinks nature has a holy plan. The classicist, the modernist, and the pragmatist do not. And neither does the scientist. In the end, the most pressing questions in the education wars are not just empirical, scientific questions, but also ethical ones regarding the unfortunate social consequences of the progressive faith, especially the perpetuation of the test-score gaps among racial and economic groups. Are we to value the aesthetics of diversity and the theology of spilt religion above social justice? That is the unasked question that needs to be asked ever more insistently. Economic and political justice are strenuous goals. They cannot be achieved by doing what comes naturally.

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Me, My Sons, and E. D. Hirsch

by Sol Stern

After reading one of my articles about E. D. Hirsch's education ideas, someone asked me what had led to my interest in Hirsch's work. The assumption behind the question seemed to be that I had embraced Hirsch's theories after a serious intellectual quest. But the truth is more mundane and somewhat personal. I first turned to Hirsch's writing out of desperation because I was baffled by the strange educational practices I witnessed at the famous New York City public school that my sons attended from 1987 to 1997.

My kids' school, PS 87, also known as the William Tecumseh Sherman School, is located on Manhattan's Upper West Side. My wife and I were delighted when our elder son was admitted to this school because it had just been ranked by Parents magazine as one of the country's ten best elementary schools—public or private—and the New York Times profiled it as one of the few city schools that middle-class parents still clamored to get their kids into.

PS 87 had a reputation for adhering to the "progressive education" philosophy, but this didn't concern me at the time. Though I had been a journalist for over two decades, I had never written about the schools and knew little about the problems of American education. I certainly had no understanding of what progressive education would mean concretely for my children, other than the fact that PS 87 seemed committed to providing a nurturing and less restrictive environment for its students. For example, I immediately noticed that instead of sitting in rows facing the teacher, as I did when I attended the New York City public schools, the children in the earlygrade classrooms sat in a circle on a rug and often worked together in groups. I was told that this was the "open classroom" reform, introduced in the 1970s. The new seating arrangement seemed harmless enough; indeed, I thought it was quite charming.

I became an active, involved parent and quickly received a crash course in the implications for learning of PS 87's progressivism. Many of the school's teachers received their training at such citadels of progressive education as Columbia University's Teachers College and the Bank Street College of Education. They were inculcated in the shibboleths of progressive education, such as "teach the child, not the text" and that all children are "natural learners." Accordingly, the ideal teacher must now be a "guide on the side" instead of a "sage on the stage."

Many of PS 87's teachers taught writing by a new method called "the writing process," based on the romantic assumption that children were natural writers waiting to have their inner talents unlocked from the straitjacket of "drill and kill" traditional pedagogy. The program was championed in NYC by Teachers College's leading progressive educator, Lucy Calkins. Parroting Calkins, our school's teachers assured parents that the traditional focus on sentence structure, proper grammar, and correct spelling had been found to stifle children's imagination. With the writing process, children could now dispense with such strictures. They were encouraged to write in journals about whatever subjects came to their mind, misspellings and all, and told by teachers that the quantity of the writing was more important than the quality. Students would edit one another's journals, with a minimum of guidance from teachers. The teacher would then "publish" each student's work—just like professional writers.

PS 87 had no coherent, grade-by-grade curriculum. Thus my son's thirty-something thirdgrade teacher (one of the most popular in the school) decided on his own to devote months of classroom time to a project on Japanese culture, which included building a Japanese garden. Each day when my son came home from school, I asked him what he had learned in math. Each day, he happily said the same thing: "We are building the Japanese garden." My wife and I expressed our concern to the teacher about the lack of direct instruction of mathematical procedures such as long division and multiplication, but he reassured us that constructing the Japanese garden required "real life" math skills and that there was nothing to worry about.

But I worried a lot, and even more so when my son moved up to the fourth grade. His new teacher assigned many more "real life" math problems, including one in which students were told to calculate how many Arawaks were killed by Christopher Columbus and his crew in 1492 during their imperial conquest of Hispaniola.

PS 87 seemed increasingly adrift in this way, with no essential texts that each student was expected to master. The most troubling thing I discovered about the school was how little the children were taught about such foundational subjects of our civic culture as the American Revolution, the framing of the Constitution, and the Civil War. I can still vividly recall a conversation with my younger son and several of his classmates when they were in the fourth grade. I innocently had asked the children what, if anything, they knew about the famous Union commander their school was named after. They gave me blank stares. After more inquiry, I realized that not only hadn't the children been taught about the brave soldier who delivered the final blow to the slaveholders' empire, but they knew almost nothing about the Civil War. They weren't even familiar with the terms "the Union" and "the Confederacy."

More disturbing was what PS 87's principal at the time said when I informed him of my conversation with my son and his classmates. "It's important to learn about the Civil War," he granted, "but it's more important to learn how to learn about the Civil War. The state of knowledge is constantly changing, so we have to give children the tools to be able to research these things and, of course, to think critically."

By now, I was looking for a coherent and independent explanation of what was happening in PS 87's classrooms other than the self-serving rationalizations offered by our school's principal. I found it in E. D. Hirsch's first two education books, published during that period. After reading Cultural Literacy (1987) and The Schools We Need and Why We Don't Have Them (1996), I experienced the eerie feeling that without ever having stepped into our school, Hirsch was accurately describing PS 87's dominant classroom culture. His books provided critical insight into what my sons' principals and teachers were trying to do and why they were doing it. Hirsch convinced me that despite their decent intentions, PS 87's teachers had abandoned common sense in favor of pleasant-sounding instructional fads that were causing more harm than good for the school's children, particularly its minority children.

Cultural Literacy became a surprise best seller in part because parents around the country were beginning to ask questions about who was responsible for the lack of academic substance in their children's schools. Hirsch addressed that concern in virtually the opening sentence of the book: "[The] unacceptable failure of our schools has occurred not because our teachers are inept but chiefly because they are compelled to teach a fragmented curriculum based on faulty education theories."

The fragmented curriculum didn't happen by chance or because of professional incompetence. Rather, it was intended, quite deliberately, by the schools of education and thus deeply influenced the instructional practices in schools like the one my sons attended. It wasn't that the educationschool professors favored the wrong curriculum, Hirsch insisted, but that they stood for no curriculum at all. Citing romantic theories of child development all the way back to Rousseau, the progressives argued that, with just a little assistance from teachers, children would figure it out as they went along. In progressive education jargon, the children were capable of "constructing their own knowledge."

Even more important, Hirsch showed that the most devastating consequence of progressive education doctrines is that they widened, rather than reduced, the gap in intellectual capital between middle-class children and those from disadvantaged families. "Learning builds cumulatively on learning," he wrote. "By encouraging an early education that is free of 'unnatural' bookish knowledge and of 'inappropriate' pressure to exert hard effort, [progressive education] virtually ensures that children from well-educated homes who happen to be primed with academically relevant background knowledge which they bring with them to school, will learn faster than disadvantaged children who do not bring such knowledge with them and do not receive it at school." Without this background knowledge, which can be provided only by a planned, coherent curriculum, disadvantaged children fall even further behind in the crucial subject of reading comprehension. Thus they are blocked from educating their way out of poverty. In one chapter of The Schools We Need, Hirsch suggested that the education reform he was

advocating—a content-rich curriculum—constituted the "new civil rights frontier." And this was long before politicians of both parties began using that phrase.

Another chapter of *The Schools We Need* is titled "Critique of a Thoughtworld." It describes how institutions like Teachers College created an "impregnable fortress" of ideas and doctrines, which were then transmitted to future teachers and to the parents who use the public schools. "Like any guild that determines who can and cannot enter a profession," Hirsch wrote, "the citadel of education has developed powerful techniques for preventing outside interference, not least of which is mastery of slogan." As Hirsch would soon discover, the ed-school professoriate was not about to accept any outside interference from the academic elitist from the university English department.

Prior to venturing into the education wars, Hirsch had trained in literary studies with the "New Critics" at Yale University, had become a distinguished professor of English literature at the University of Virginia, and had acquired a reputation as one of the nation's leading scholars and literary critics. (His academic specialty was the Romantic poets.) Even Hirsch could not have anticipated the level of vitriol, even hatred, directed at him when he crossed the border separating the academic universities and their ed-school affiliates and dared critique the education professors for the wrongheaded training they were providing to future teachers. Like the closed thought world that Hirsch had described in his books, the progressive education establishment turned on this interloper, branding him a reactionary, an elitist, and a defender of white privilege—all this merely for suggesting that teachers in the nation's public schools ought to be offering their students the basic academic content and background knowledge they needed in order to become proficient readers and knowledgeable citizens of our democracy.

Hirsch came under fierce attack by education progressives for his theory of reading comprehension as well as his elitist presumption that a white male college professor should decide what American children should learn. Critics often lumped him together with the three "killer Bs"—(William) Bennett, (Allan) Bloom, and (Saul) Bellow—whom liberals loved to hate at the height of the 1980s culture wars. Because Bloom's The Closing of the American Mind appeared just above Cultural Literacy on the best-seller lists for most of 1987, many commentators paired the two writers as conservatives agitating for a return to a more traditional, elitist education.

In 1997, the journal of the American Educational Research Association (AERA), the organization representing the nation's education professors, published an unprecedented attack on Hirsch's work by a progressive educator named Walter Feinberg. Feinberg's 8,000-word broadside also unintentionally illuminated what progressives believed about the purpose of American schooling. "Hirsch minimizes a history of racial and gender bias as factors in differential educational and economic achievement," Feinberg wrote. "He dismisses complex theories of social class

reproduction, and he demotes the importance of pedagogies that encourage the construction and negotiation of meaning across communities of difference. He insists that teachers and the texts are the proper bearers and students the proper recipients of meaning and refuses to understand the importance of meaning as a negotiated product in a multicultural society."

Since Hirsch supported traditional, content-based education and a rich curriculum, one has to admit that he was guilty as charged. But there's the rub. In this one paragraph, Professor Feinberg powerfully confirms Hirsch's description of the fecklessness of the ed schools. When I read this essay, I finally understood exactly what my sons' teachers at PS 87 were up to. Instead of directly teaching students about the American founding and the Civil War, they were "negotiating meaning across communities of difference."

Fortunately, Hirsch wasn't deterred by the education professors' postmodernist babble and their attacks on him as a racist. He continued exposing the utter lack of empirical and scientific validity to the progressives' pedagogical principles. Hirsch had spent the better part of the decade since Cultural Literacy mastering the findings of neurobiology, cognitive psychology, and psycholinguistics on which teaching methods best promote student learning. The scientific consensus showed that schools could not raise student achievement by letting students construct their own knowledge. The pedagogy that mainstream scientific research supported, Hirsch showed, was direct instruction by knowledgeable teachers who knew how to transmit their knowledge to students—the very opposite of what the progressives promoted. In *The Knowledge* Deficit (2006), Hirsch cited the overwhelming scientific consensus supporting his theory linking the amount of background knowledge acquired by students to their level of achievement in reading comprehension. And he reemphasized that this was the great social-justice issue in American education: that the only way for the schools to narrow the racial achievement gap was to provide a grade-by-grade curriculum, stressing content knowledge.

The Making of Americans: Democracy and Our Schools (2010), the most recent of Hirsch's quartet of education books, deepens his argument that a content-rich curriculum is also essential for citizenship in our ethnically diverse democracy. The Founders relied on the common schools and a common curriculum for teaching the virtues that would keep the new republic intact. They believed that the schools must create virtuous, civic-minded, and knowledgeable citizens. The best way to do that was to teach the same grade-by-grade curriculum to each child. Thomas Jefferson even proposed a common curriculum, so that children's "memories may here be stored with the most useful facts from Grecian, Roman, European, and American history." Citing such statements by the Founders, Hirsch writes: "The school would be the institution that would transform future citizens into loyal Americans. It would teach common knowledge, virtues, ideals, language, and commitments."

Hirsch's description of the Founders' educational views is reverential and elegiac. Well into the nineteenth century, America's leaders believed passionately that the schools' main task was "the making of Americans." He refers here not only to the millions of immigrants arriving throughout the nineteenth century but also to the native-born from different regions and religions, who needed common schools and a knowledge-based curriculum as the means of acculturation into the "common language community" of the new country.

Tragically, the Founders' republican values are not in good hands in the world of education today. Few classroom teachers-in-training learn that the purpose of schooling in America is to create knowledgeable, civic-minded citizens, loyal to the nation's democratic institutions, as Jefferson dreamed. Rather, in their ed-school courses, they are often taught that it is acceptable to use the classroom to undermine those institutions and the Founders' ideals and turn children into champions of "social justice," as defined solely by the education professors.

In reviewing Hirsch's education writings, I was struck by an essay he published in March 1989 in the New York Review of Books. The reason this article caught my attention was its title, "The Primal Scene of Education." As my fellow writers know, choosing the title of an article is usually an afterthought, more often than not left to the discretion of the editor. I don't know if Hirsch composed this particular title, but it became one of those rare literary occasions when the title of an article conveyed a meaning and an implication even beyond its content. For Hirsch, the "primal scene of education" was, of course, the classroom. He meant it in two ways. First, it is in the classroom that the progressives' utopian fantasy that children can construct their own knowledge finally meets up with reality. The goal of raising poor children's academic achievement can be achieved only through the direct teaching of content knowledge.

Second, and equally important to Hirsch's project, the classroom must also be viewed as the primal scene, the ultimate test, for all education reform schemes. Just two years after he had ventured into the education debates, Hirsch was suggesting that school reformers who merely stressed structural changes and financial incentives within the education system were missing an important element—the fact that all reform schemes must ultimately be judged by whether they produce good instruction by the teachers in the classroom. "The effort to develop a standard sequence of core knowledge is, to put it bluntly, absolutely essential to effective educational reform in the United States," Hirsch wrote. "Amid the other improvements that may occur...the inherent logic of the primal scene of education itself still remains."

In the NYRB article, Hirsch recounted his conversations with a group of college deans at an academic conference from whom he "heard a chorus of anecdotes about the declining knowledge and abilities of entering freshmen. American colleges and universities at their best are still among the finest in the world," Hirsch wrote. "But in many of them the educational level of incoming

students is so low that the first and second years of college must be largely devoted to remedial work. In the American school system, it is mainly those who start well who finish well. Business leaders and the general public are coming to recognize that the gravest, most recalcitrant problems of American education can be traced back to secondary and, above all, elementary schooling."

That was Hirsch's portrait of American K-12 education almost a quarter-century ago. Remarkably, that grim assessment still rings true today. SAT verbal scores have shown little or no improvement, and, according to the recently released NAEP long-term assessment, "average reading and mathematics scores in 2012 for seventeen-year-olds were not significantly different from scores in the first assessment year [1971]." There have been improvements in reading and math scores in the lower grades on the NAEP tests, but, as Hirsch warned twenty-five years ago, these gains aren't significant if they disappear in high school and if students entering college or the workforce—the end product of the public school system—still need remediation in reading and writing.

Besides the NAEP and SAT data, there is additional confirmation that graduating seniors know very little these days. It comes from the countless reports by universities about the extent of remediation needed by entering freshmen, as well as from books like Mark Bauerlein's The Dumbest Generation. Just before she did a(nother) 180-degree turn and decided that U.S. students were doing well on the NAEP, Diane Ravitch also called attention to the academic stagnation in K-12 education. "Many reports and surveys have demonstrated that large numbers of young people leave school knowing little or nothing about history, literature, foreign languages, the arts, geography, civics or science," she wrote in The Death and Life of the Great American School System (2010).

It is tempting to speculate how different it might have been if more attention had been paid by the K-12 education establishment and the school reform movement to Hirsch's plea for a rich content-based curriculum. Unfortunately, school districts across the country largely ignored Hirsch's proposed curriculum. Moreover, the nation's school reform movement put almost all its efforts and resources into trying to introduce market incentives and competition into the school systems and ignored the curriculum issue. And in the ed schools, future classroom teachers must still search far and wide in their assigned course syllabi to find a single reference to Hirsch's work—and yet they are required to read texts by radical education thinkers such as Paulo Freire, Jonathan Kozol, and ex-Weatherman Bill Ayers. (Freire's Marxist tract, Pedagogy of the Oppressed, has sold more than a million copies, mostly in ed-school courses.)

Yet Hirsch never lost his faith that in this democratic republic, ideas do matter and that good ideas eventually triumph over bad ideas. Hirsch is an American original and an incurable

optimist. He truly believes in the old American aphorism that if you build a better mousetrap, the world will come to your door. In the 1989 NYRB article, he wrote:

When I am feeling hopeful, I imagine to myself how things might change. A few schools scattered over the country will hold their pupils accountable for acquiring an agreedupon minimum core of knowledge grade by grade. Because classroom work in such schools will be more effective and interesting for their pupils, children will feel more curious and eager. Their abilities to speak, write, and learn will improve noticeably. Students from such schools will make significantly higher scores on standardized tests of scholastic aptitude and achievement. Neighboring schools will observe the results, and, not wishing to be outshone, will follow the lead. District and state offices will find it convenient not to resist these successful undertakings. Even the education establishment itself may in time begin to say in its hundreds of conferences and dozens of journals, which are now vigorously resisting such changes, "We knew it all the time, that was what we were trying to tell you."

That's what Hirsch set out to do twenty-five years ago. With the royalties from his best-selling Cultural Literacy, Hirsch founded the Core Knowledge Foundation in his hometown of Charlottesville, Virginia. The foundation, in turn, created a knowledge-based curriculum for elementary schools, based on Hirsch's principles. It was then able to establish a national network of Core Knowledge schools, both charters and public schools. The network now includes nearly 1,000 Core Knowledge-affiliated schools. These schools have become the "thousand points of light" that Hirsch hoped would eventually spread the news to teachers and parents that a contentrich curriculum works better than the non-curriculum favored by progressive educators.

Though Hirsch was a liberal Democrat, he received early support for the Core Knowledge project from influential education conservatives like William Bennett, Chester E. Finn, Jr., and Diane Ravitch (at least, until she recently decided that the progressives were right after all). Another influential supporter was Albert Shanker, president of the American Federation of Teachers. Shanker frequently used his weekly (paid) column in the New York Times to extol the Core Knowledge approach to instruction, and the AFT's quarterly magazine, American Educator, frequently published Hirsch's work. That meant that the million teachers who were members of the AFT had the access to Hirsch's ideas that had been denied to them in their education-school courses.

The most important breakthrough for Hirsch's ideas in the public schools occurred in 2009, when Joel Klein, chancellor of the 1.1 million-student New York City school system did something extremely rare for a public official. He admitted that he might have been wrong in choosing schools' literacy programs from Teachers College. He then created a three-year pilot program in which ten city elementary schools would use the Core Knowledge early-childhood literacy program. The Core Knowledge schools were matched with ten demographically similar schools using the "balanced literacy" reading program, another invention of Teachers College's Lucy Calkins that most city schools had been using up till then. The study confirmed that classrooms using Core Knowledge far outperformed those using the Teachers College balanced literacy program. It wasn't exactly the "gold standard" random assignment study that education researchers prefer, but a New York Times reporter essentially endorsed Hirsch's reading program when she wrote that the children using Core Knowledge "outperformed those at other schools that used methods that have been encouraged since the Bloomberg administration's early days."

At about the same time that the results of the New York City pilot study were announced, the final draft of the Common Core State Standards was released and eventually adopted by forty-six states and the District of Columbia. There is no mention of Hirsch or the Core Knowledge curriculum in the 220-page English language arts section of the standards, but it still represents the most consequential vindication yet of Hirsch's vision.

The text of the Common Core makes clear that the standards do not by themselves specify a particular curriculum; they merely state what children should know at the end of each grade level and the skills that they must acquire to stay on course toward college or career readiness. But here's what the Common Core does say about the need for a coherent curriculum: "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."

My colleague Robert Pondiscio says that these are the most important fifty-seven words in education reform since the publication of the Nation at Risk report in 1983. I agree with him. Until the Common Core, there was little chance for Hirsch and his supporters to convince education schools and school districts that the key to narrowing the achievement gap is a rich curriculum that requires teachers to transmit content knowledge to their students. Now, with the adoption of the Common Core by the states and their commitment to complement the standards with "a well-developed, content-rich curriculum," there is an opening to do just that.

New York, the first state to adopt the standards, immediately chose the Core Knowledge Foundation to create the English language arts curriculum for grades pre-K-2. These curriculum materials are posted on the state education department's website and are available for free to every school in the state (indeed for any school in the country). After a quarter-century of neglect, this is a redemptive moment for E. D. Hirsch. It's also a great opportunity for PS 87's teachers to relearn what they should be doing in the classroom, the primal scene of education.

Complex Texts Require Complex Knowledge: Will the New English Standards Get the **Content Curriculum They Need?**

by Ruth Wattenberg

For three decades, E. D. Hirsch has argued that reading requires knowledge and that comprehension depends on knowing something about what is being discussed. High schoolers studying the Federalist Papers must know something about early American history to understand the relevance of its arguments. Adults following the debate over carbon emissions from coal-fired plants must have a grasp of the sciences to evaluate the claims and counterclaims made about global warming. The more that students know about a topic and its vocabulary, the more that they can learn from a new reading on a related topic, which, in turn, positions them to learn more from the next reading, and so on.

The opposite is true as well, with devastating effects on equity. Hirsch explains that advantaged students who learn lots of background knowledge at home arrive at school with "the mental scaffolding and Velcro to catch

To build knowledge systematically, beginning in the earliest elementary grades, English language arts "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.... Preparation for reading complex informational texts should begin at the very earliest elementary school grades."

> - From the Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

hold of what is going on, and they can turn that new knowledge into still more mental Velcro to gain still more knowledge. But those children who arrive at school lacking the relevant experience and vocabulary—they see not, neither do they understand. They fall further and further behind."1

The antidote to this downward spiral, according to Hirsch, Marilyn Adams, and others, is a strong school curriculum that systematically builds a student's store of knowledge.² Such a curriculum should use the most effective teaching approaches, including teaching topics in a coherent order and over a sustained period. This optimizes the Velcro effect, exploiting the fact that students learn new material and new words more quickly when the topic is familiar to them.

Yet this understanding of reading comprehension and how to strengthen it has barely penetrated American education (especially its elementary schools)—despite substantial evidence from cognitive science supporting it.³ Instead the focus of reading comprehension instruction has been to teach a set of skills—comprehension, inference, metacognitive—not to impart the necessary knowledge.

The new Common Core State Standards (CCSS) for English language arts,⁴ now adopted by fortyfive states, are a welcome change from this strictly skills-centric approach to reading. In many ways, these standards resemble previous standards for English language arts (ELA), defining the skills in reading, writing, speaking, and listening that students should acquire in each grade, though with more rigor and precision. For example, they ask high school juniors and seniors to read, comprehend, and analyze such complex texts as Henry David Thoreau's Walden and Zora Neale Hurston's Their Eyes Were Watching God. Like previous expectations in ELA, these are skills standards (roughly 300 of them). They are also content-free, with a few well-chosen exceptions including Shakespeare and seminal documents of American history, fables, tales, and myths.

Yet, unlike previous ELA standards, the CCSS have a commitment to content—the facts, ideas, connections, and concepts of the major K–12 disciplines: literature, history, science, and the arts. To read and understand complex texts, the CCSS say, skills are not enough. Students will also need a "foundation of knowledge" in "history/social studies, science, and other disciplines," which will "give them the background to be better readers in all content areas." In addition, "Students can only gain this foundation when the curriculum is intentionally and coherently structured to develop rich content knowledge within and across grades." Building this foundation "should begin at the very earliest elementary school grades."5

But no such curriculum is commonly found in America's elementary schools; it must come from elsewhere—states or districts, commercial publishers, or teachers. What is necessary to put such a curriculum into place is substantial; simply tossing in random additional content in various grades is not adequate. Unfortunately, it does not appear that states or districts or the publishers of elementary reading textbooks are taking the necessary steps to put this contentrich curriculum into place. Let's hope that situation changes because without this indispensable curricular foundation, the CCSS do not have a chance to lift students to the reading levels that they propose.

This paper first discusses the curricular vacuum that exists at the elementary level, followed by what it would take to fill that void, and concludes with a review of CCSS implementation thus far.

The Entrenched, Content-Poor, Elementary Curriculum

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, 6 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;⁷ subject-matter exams in a growing number of states (as opposed to minimum competency tests);8 increased numbers of students taking courses that are more advanced (though students are not always learning more as a result); 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, the Nation at Risk report 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, the post-1983 education reforms barely touched them. Here is the crucial fact about the teaching of content in the elementary grades then—and still: So much time is spent on reading and math, especially reading, and so little time on the subjects—history/social studies, science, literature and arts—that build a student's foundation of knowledge.

According to the 1977 National Survey of Science and Mathematics Education, early-elementary teachers spent 95 minutes per day on reading and a total of 38 on both science and social studies—2.5 times as much on reading as on both other subjects together.¹⁰ In upper elementary, when students have presumably learned the basic reading skills and reading time can be substantially cut back, teachers still spent 66 minutes per day on reading, 28 on science, and 34 on social studies—with reading still getting about twice the time of either of the other subjects.¹¹

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 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 thirtyfour basal readers¹² for second, fourth, and fifth grades, from eight major publishers, for a total of 1,959 different selections. Here is what they found:

• 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 or music.13

And, the lower the grade, the emptier. In second-grade books, 52 percent of the texts had no subject-matter content at all. Some 11 percent had science content and 14 percent social science.¹⁴ Taken as a whole, U.S. elementary schools in the 1980s were woefully thin on content.

Since the 'Eighties

Since then, little has 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. Consider this vague fourth-grade science standard from New Jersey in 2012: "Demonstrate understanding of the interrelationships among fundamental concepts and the physical, life, and Earth systems sciences." The reviewers concluded: "These expectations contain virtually no content; it's impossible to determine what students should know or be able to do. Furthermore, standards are frequently repeated from grade to grade, offering no clear progression of content or rigor."15

In social studies, where the average grade was a "D," the reviewers wrote in 2011 about Kentucky's standards: "Primary grades (K-3) focus on general concepts of American democracy, local Native American tribes, and national symbols and holidays.... But no specific subject matter—beyond the grade block's broad generalizations—is spelled out." ¹⁶

Like standards, textbooks have continued to neglect the content that underlies reading comprehension. For example, twenty years after Schmidt's study of basal textbook content, Kate Walsh, now director of the National Council on Teacher Quality, reviewed in 2003 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."17

Even Less Time for Content

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. According to the National Survey of Science and Mathematics Education (NSSME), the total time spent in grades K-3 on both science and social studies has dropped forty-five minutes per week from 2000 to 2012—from 3 hours and 40 minutes in 2000 to 2 hours and 55 minutes in 2012. (It had risen slightly from 1977 to 2000; it is now lower than it was in 1975.) In grades 4–6, the drop from 2000 to 2012 was 95 minutes per week! (Table 1 shows minutes per day.)

Table 1. Minutes spent per day on science and social studies

NSSME/Horizon	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

Sources: E. R. Banilower et al., Report of the 2012 National Survey of Science and Mathematics Education (Chapel Hill, N.C.: Horizon Research, 2013), Table 4.2; Weiss, Report of the 1977 National Survey of Science, Mathematics, and Social Studies Education, Table 25; and Report of the 2000 National Survey of Science and Mathematics Education, Table 4.3.

In 2010, in a national survey of teachers conducted by Common Core (an independent organization, unconnected to—though supportive of—CCSS), ¹⁸ 67 percent of regular elementary teachers 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 ten years earlier). Fifty percent said that science had been getting less; and 49 percent and 37 percent said the same, respectively, of art and music.

The squeeze on content was even tighter for struggling students. When elementary teachers were asked during what time period struggling students received extra instruction in ELA or math, 60 percent said that they were pulled from social studies class; 55 percent said from science class. 19 The bottom line: For decades, elementary schools have neglected to build the content foundation that students need and that the CCSS 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. Once revamped, curricular tools (curriculum frameworks, course outlines) and classroom materials that embody the new curriculum must be produced.

Reimagining the Elementary Curriculum

Consider the changes needed for a content-rich curriculum to thrive. First, much more time must be devoted to learning content. In theory, this time could be made available through muchexpanded science and history/social studies classes. A more likely, viable alternative is to infuse the content into the ELA class, an idea that E. D. Hirsch broached in his 2006 article, "Bringing Knowledge to the Language Arts." He argued that the constantly expanding ELA time block could aid content education rather than be an obstacle to it, if "we can impart to all students, in language arts classes and throughout the day, the knowledge that will enable them to read with strong comprehension."²⁰ This approach to integrating content into ELA is reflected in the CCSS, as evidenced by their section titled "How to Build Knowledge Systematically in ELA K-5." ²¹

Second, to build foundational knowledge in history/social studies, science, and the arts, the CCSS call for a curriculum that "is intentionally and coherently structured to develop rich content knowledge within and across grades."22 The best learning proceeds when new material is connected to previously learned material; that is when the Velcro of existing knowledge can best grab hold of the new material.

The coherent curriculum that the CCSS call for requires frameworks for teaching history/social studies, science, and the arts that identify the ultimate end-of-school learning goals for each subject and translate them into year-by-year topic sequences (much as the CCSS does for ELA). These sequences must indicate what content and skills are to be addressed in each grade, at what level of complexity, in what detail, and how it connects to content taught in previous and subsequent grades (again, much as the CCSS do for ELA). In a handful of states, the specificity and coherence of the existing history and science standards will suffice; but we know that in most states, the current standards in these subjects do not provide the necessary, coherent, grade-bygrade specifics.23

In theory, these curriculum frameworks could be developed by a school district or a state (or even a school). The benefit of establishing them at the state level is simply so that when students transfer from one school or district to another (disproportionately experienced by poor children), their education will not be further disrupted by the gaps and repetition that inevitably occur when they face a different curriculum after each move.

Third, once new frameworks clarify the content that should be taught at each grade, choices must be made about how to apportion the content to stand-alone subject classes or to content-infused ELA classes. Ideally, these choices should be reflected in course outlines. As with the frameworks themselves, there are advantages to establishing the course outlines at the state level. In this case, textbooks and curricular materials prepared for the ELA and subject classes could be developed for and shared across the state.

Fourth, CCSS requires that for each grade's ELA instruction, "texts—within and across grade levels—[are] 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 for these topics." The frameworks and course outlines referred to earlier are what make it possible for teachers to introduce topics in early grades and know that they will be "expanded and developed" in later ones. The CCSS liken the linking of these texts within and across grades to "giving children various pieces of a puzzle in each grade that, over time, will form one big picture." This text selection could be made at the state or district level or at a school where teachers had time to take up such curricular work.

For some teachers, these raw materials—the grade-by-grade topic sequences and possibly the texts—will be all the guidance they want or need. Within this curricular framework, they can create and assemble a coherent collection of daily lessons from online resources, from their own files and materials, and via collaboration with their colleagues. But most elementary teachers will appreciate and benefit from (as will their students) a much fuller complement of curriculum materials that enable them to address the ELA skills and content knowledge prescribed for their grade. These include lesson plans, texts for students, read-alouds for teachers, classroom exercises, assignments, benchmark assessments, and vocabulary lists. Some of these curriculum materials would be customized for ELA classes, using the sequence of knowledge-building texts called for in the CCSS; others would be designed for separate classes in science, social studies, and the arts. Depending on their needs and skills, teachers would use a lot or just some of the provided materials. Either way, the materials would constitute a curricular spine around which teachers could improvise, confident that they were providing their students with the requisite knowledge. ("A Model for Content Instruction at the Elementary Level"—see sidebar—describes a curriculum that meets these criteria.)

As the Common Core standards kick in, and states and schools gird for the new assessments aligned with them, to what extent is such a revamped content-rich curriculum being laid? As states undertake implementation of the CCSS, are they focused narrowly on the 300+ skill standards? Or are they taking steps, as CCSS urges, to upgrade dramatically the content that is taught, through coherent content-infused ELA curricula and/or through new expanded courses in the content areas? Do the newly revised basal readers, which publishers claim are now aligned with the CCSS, integrate the necessary content? Or is their content still banal and their focus on skills still the overwhelming emphasis?

A Model for Content Instruction at the Elementary Level

The Core Knowledge Foundation (on whose board I serve) promotes the educational ideas of E. D. Hirsch. In 1988, the foundation first published the Core Knowledge Sequence.²⁴ It identifies the content from all subjects that students must learn by the end of grade eight to be well prepared for rigorous high school academics. Then it translates that content into grade-by-grade guidelines in which topics taught in one year build off the previous year's learning and create the platform for the next year.

The foundation has also produced Core Knowledge Language Arts (CKLA), a preschool through third-grade ELA curriculum designed for the extended ELA block and anchored by the coherent grade-by-grade content set forth in the Core Knowledge Sequence. The curriculum allows ample time to teach both the reading skills and the content that students need, which lays the foundation for more advanced reading and learning in later grades. Specifically, the CKLA curriculum:

- Engages students in the literary, arts, historical, and scientific content essential for broader and deeper studies in later grades.
- Builds knowledge sequentially and cumulatively, connecting topics and concepts within and across grades, using the grade-by-grade Core Knowledge Sequence as the spine of the coherent curriculum.
- Uses domain immersion to sustain attention on each topic, thus taking advantage of the finding that students can grasp the meaning of more and more complex domain-related vocabulary (and presumably, the ideas represented) when a topic is revisited at least several sessions in a row.
- Uses a heavy dose of teacher read-alouds (also recommended by the CCSS), so that long before children have fully developed reading skills, they can learn and discuss material presented orally by teachers.²⁵

As a result, a second-grader, for instance, would get a substantial education in twelve domains, each of which builds on prior learning and sets the stage for future learning. Among the domains are: Fairy Tales and Tall Tales, Early Asian Civilizations, The Ancient Greek Civilization, Greek Myths, Westward Expansion, The U.S. Civil War, Fighting for a Cause, Cycles in Nature (plant, animal, human, and seasons), and Insects.

After learning from such curriculum in grades K–5, a middle schooler will possess the content foundation to read and comprehend complex grade-level texts across a wide range of topics in each of the core subjects—and then be ready to tackle the complex high school texts prescribed by the CCSS.

Implementation: The Evidence So Far

CCSS implementation is now well under way. According to the Center for Education Policy, "curricula aligned to the CCSS in math and English language arts are already being taught in at least some districts or grade levels" in thirty states.²⁶ The major publishers have revised their textbooks, issuing new versions that purport on their covers or on their websites to be aligned with the CCSS. While there is no comprehensive, detailed report of implementation activities, it is possible to glean impressions. To do so, I reviewed news coverage, several recent studies on CCSS implementation, and the CCSS/ELA areas on a handful of state education department websites. I also closely examined the second-grade basal readers from three popular textbook publishers.

Clearly, states and textbooks are emphasizing certain elements of the CCSS and not others. Specifically, both have focused on the CCSS call for: 1) early grades reading selections to be split 50–50 between fiction and non-fiction, which is an important way in which the CCSS hope that content knowledge will be built; 2) emphasizing the reading and interpretation of the text itself citing its evidence, understanding its arguments, comparing it to other texts—in contrast to interpreting it through the lens of student experience and opinion; and 3) reading texts of gradelevel complexity as opposed to leveled texts which are chosen to match, not stretch, students' reading levels. Each of these emphases is noted repeatedly in the 300+ numerated standards. In contrast, the call for building knowledge coherently within and across grades can't be captured by individual CCSS standards; and it is neglected in new textbooks and in states' implementation efforts. Here are the highlights of what I learned, beginning with the textbooks.

The Revised Basal Readers

Education Week reporter Stephen Sawchuck reviewed the pre- and post-Common Core versions of a number of fifth-grade texts to determine what changes had been made. He reported a number of changes, all of which related to meeting the CCSS's skill standards. "In the 2013 version of its Reading Street series, Pearson officials have excised 'reader response' questions and replaced them with prompts asking students to 'use examples from the text to justify your answer."27 In another case, a revised assignment asked students to focus on "sensory details and other language" (a requirement of the CCSS). Sawchuck also spotted a number of changes related to how, and how often, students approached writing tasks.

But do the basal readers focus sustained attention on important topic domains, thus building students' content knowledge, as called for by the CCSS? In his comparison of the newest textbooks and their immediate predecessors, Sawchuck reported no major changes in the amount, quality, or coherence of the books' content except that they included additional non-fiction passages. But had the textbooks already improved their content from a decade ago when Walsh last reviewed them? If they had, that attention would not have been picked up by Sawchuck's look at only the most recent revisions.

To find out, I carefully reviewed the first-semester textbook from the second-grade basal series published by each of three major textbook publishers: Scott Foresman, Reading Street: Common Core; Houghton Mifflin, Journeys: Common Core; and Macmillan, Treasures.²⁸ As suggested in their titles, both Reading Street and Journeys have published newly revised textbook series that purport to reflect the Common Core Standards. As of this writing, Treasures had not yet issued a new series, but it has published an alignment guide, suggesting that its 2011 version is already aligned with the CCSS.

Vague, Content-light Themes. More Non-fiction but No More Coherence

Remember that the CCSS explicitly recommend that ELA texts be selected "around topics or themes that systematically develop the knowledge base of students." These textbooks do not do so. In two of the three textbooks (Reading Street and Treasures), the themes remain, as Walsh reported in 2003, vague "catch-all labels" that "address only utterly ordinary day-to-day knowledge."29 Examples are "Friends and Family," "Community Heroes," "Working Together," and "Creative." The third textbook (*Journeys*), which consistently has stronger content than the other two, does not name its units by themes but gives a topic for each week of lessons. The topics are a mix of the substantive and commonplace—for example, "Animal Traits" and "Places Around Town."

There appears to be more non-fiction in these textbooks than what either Schmidt or Walsh found. A small number are excellent, informative readings containing foundation-building content, including readings on Helen Keller, the desert, and African-American inventors; and a book "Super Storms," by noted children's science author Seynour Simon. Most of the non-fiction is middling, offering light doses of random content.

Hardly Any Sustained Knowledge-building

In this random content lies the greatest weakness of these Common Core-ready books. The CCSS is explicit about the texts that should be used in ELA classes: "Within a grade level, there should be an adequate number of titles on a single topic that would allow children to study the topic for a sustained period." To measure prolonged attention, I established a very, very low standard—the 2+1 rule: I carefully reviewed each of these first-semester textbooks to identify content of any grain size—ideas, facts, concepts—that appeared at least twice in a one-week unit and then at least once more in another unit, in the first semester textbook OR the second-semester textbook.30

A startlingly small amount of content reached this threshold. In one textbook,³¹ just one piece of content met this threshold—and it's a stretch: The reading selections included a strong passage on the desert, a companion piece on rain forests, a later reading about anteaters, and, many weeks later, a folktale that took place in a rain forest. Together, these selections, in an albeit loose arrangement, convey the broad idea that animals differ, live in different environments, and their features (e.g., size, amount of fur) and habitats relate to one another.

In another textbook,³² a larger number of topics/ideas/concepts/facts receive at least minimally sustained attention, but the content on each topic is extremely thin and the array of topics random. For example, using the 2+1 rule, students would learn the definition of "immigrant," that immigrants come to the U.S. for work or family, and that their existence can be lonely but virtually nothing more. There is nothing on the history of American immigration or the conditions that drove immigrants from their home countries. The only story about an immigrant is of a young girl, whom we learn nothing about except that she is lonely and it takes her a while to feel comfortable in her new school. About a dozen other pieces of content, of roughly the same thinness, meet this threshold.

In the third textbook,³³ a topic is truly developed over a number of readings across more than a single one-week unit. Multiple readings introduce ideas and facts that will enable students to understand later the concepts of species and of adaptation (though neither word is used). In these various readings, students are introduced to many different animals (e.g., Komodo lizards, bush dogs, various insects), some of their distinct features (e.g., puppies stay with their moms for eight weeks) and some ways in which they differ from each other (e.g., "bushy" vs. "skinny"). There are many memorable selections, including a wonderful chapter on jellyfish and another on animal habitats, and more. There is much to recommend in these readings. But let's put this text's very strong handling of this one topic in perspective: Recall that the second-grade CK/ELA unit provides a comparable immersion (possibly stronger) in twelve domains over a year; if this textbook provides an equally strong treatment of a second topic in the second-semester book, it would nonetheless still amount to only two immersions in a year!

In sum, these textbooks have generally taken seriously the skill requirements outlined in the Common Core Standards. As Sawchuck noted, there is much more attention to analyzing the text and much less on student opinions; more activities require students to find evidence, read closely, compare texts, and write. Yet these textbooks do not build content knowledge coherently over the elementary years. In schools that rely on these or similar basal readers for their ELA instruction, the CCSS commitment to building knowledge would be met only if students were also experiencing strong, coherent social studies, science, and arts curricula. We know, based on data from the last decade (reviewed here in earlier sections), that such curricula have not been in place. Has that changed with the implementation of the Common Core?

State Implementation Efforts

States have invested a good deal of effort in Common Core implementation, especially by revising curricular materials, invigorating websites, and providing teaches with professional development. But my review of major reports, news coverage about implementation, and a half-dozen state websites suggests that, with one exception, the needed curricular are still absent.

Major Curriculum Reboots: Almost None

To bring in the amount of new content necessary and provide it coherently, teachers need new curricula. But with one major exception (described below), it appears that no curricular reboot is under way in the states. The Center for Education Policy has conducted multiple surveys of states about CCSS implementation.^{34, 35} While the survey asks no specific questions about revamping the content curriculum, it does pose open-ended questions about major priorities and challenges which could elicit responses related to curriculum revamping. But no such effort surfaces in any form. There is no mention of curriculum integration, of creating new content curricula to complement the CCSS, or of increasing class time for learning subjects such as history and science. Likewise, my modest exploration of state CCSS websites reveals no announcement of new curricula aimed at greatly expanding the content knowledge of elementary students. In fact, unless the website includes a copy of the full CCSS document, there is often no acknowledgment that reading at CCSS-prescribed levels requires far more content knowledge than has typically been provided!

It is hard to prove a negative. Perhaps a substantial push for new content is revealed elsewhere on the website. Maybe the surveys of states and districts simply did not ask the right questions. Maybe the significance of expanded content and materials to support such instruction is provided in professional development programs. Maybe I looked at unrepresentative state websites. And, of course, in some districts and states, the teaching of content is likely stronger than what has been described in these pages. But it does not appear that putting coherent, content-rich curricula into place is a major priority. Perhaps state curriculum officials missed the message in the standards; or perhaps they do not take the message seriously because it is not in the words of the 300+ standards themselves; or perhaps they think that their students already receive the necessary content.

The Exception: A Fully Integrated, Comprehensive Curriculum

The big exception is New York State, which is offering its early elementary teachers the fully integrated Core Knowledge/ELA program for grades K-2, free, online.³⁶ This provides teachers with a full year's worth of ELA units for each grade that address the CCSS skills and strategically selected, coherently sequenced history/social studies, science, literature, and arts content. But, even so, New York does not mandate this or any curriculum at the state level. It develops, recommends, and offers model curricula to its districts; yet it is impossible to know how many

schools and teachers will actually make use of it. Still, providing high-quality coherent curriculum materials that are accessible to teachers is a tremendously important step.

New Resources: Excellent Units to Be Found—But Typically One-Offs

Based on their websites, states appear deeply engaged in CCSS implementation, but the focus seems narrowly trained on the CCSS skills, not the broader CCSS call for building students' content foundation. For example, websites may include crosswalks between a state's old ELA standards and the CCSS, recommendations for using text-based questions, and implementation timetables.

In addition, a number of states are investing heavily in friendly, navigable websites that offer a variety of model CCSS lessons and units and/or links to organizations that provide such material, including such prestigious providers as PBS and the National Archives, and Student Achievement Partners, whose is mission is to provide support for Common Core implementation. Many of the lessons and units are beautifully created, providing substantial and interesting content plus strong instructional guidance, as well as CCSS-required skills.

But these models are typically one-offs. The content may (or may not) be compatible with a state's content subject standards but is not offered as part of a coherent sequence. Units are not typically available on each topic, and the length and emphasis of each unit bear no relationship to the importance of the topic in the overall curriculum.³⁷ Because most states' standards for elementary history and science are not sufficiently detailed and specific, there is little likelihood that the lessons will build on previously learned material or provide a platform for whatever next year's teacher teaches. To use the analogue of the CCSS, these units do not add up to the full set of puzzle pieces; and since the picture underlying the puzzle is not clear, teachers or districts cannot know which pieces to add or when. Further, it's hard to know how much traction these units will get in classrooms. Simply reviewing the unit options on the website is time-consuming.

On the bright side, the abundance of units suggests that the CCSS have unleashed lots of creative energy, from states, to teachers, and even independent organization Educational units from independent providers are not new; but by incorporating the CCSS, these units appear stronger than those offered in the past. Materials provided by Common Core (the independent organization, not the creators of the standards),³⁸ for instance, offers something between the comprehensive sequence offered by Core Knowledge and the one-off units typically available on state websites. As an example, for each of eighteen time periods in American and world history, Common Core offers one lower-grade and one upper-grade unit that is strongly aligned with the standards. While these units do not constitute a complete history curriculum, they provide teachers with a ready supply of lessons that integrate the CCSS with interesting, important historical content.

Certainly, many of these lessons will provide more content instruction than the ones that they are replacing. And, while good units inserted here and there into a child's learning are better than none, it is a stretch to think that these stand-alone units can add up to what is needed.

So far, sadly, there is little evidence that the coherent content-rich curriculum called for by CCSS is being put in place. Such a curriculum is not embodied in the new purportedly Common Corealigned textbooks, nor is it (generally) being established by states. Therefore, it seems that the high ambitions of the CCSS are unlikely to be met—unless, of course, there is a major push to alter how content is treated and taught, especially in the elementary grades.

Endnotes

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- 2. Marilyn Jager Adams, "The Challenge of Advanced Texts: The Interdependence of Reading and Learning," in Reading More, Reading Better: Are American Students Reading Enough of the Right Stuff?, ed. Elfrieda H. Hiebert (New York: Guilford, 2009).
- 3. For a short review of key cognitive science findings and their connection to reading comprehension, see Daniel Willingham, "How Knowledge Helps: It Speeds and Strengthens Reading Comprehension, Learning—and Thinking," American Federation of Teachers, 2006, http://www.aft.org/newspubs/periodicals/ae/spring2006/ willingham.cfm (originally in American Educator, spring 2006); and Adams, "The Challenge of Advanced Texts."
- 4. National Governors Association Center for Best Practices, Council of Chief State School Officers, The Common Core State Standards Initiative for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects (Washington, D.C., 2010).
- Common Core State Standards, 10.
- National Commission on Excellence in Education, A Nation at Risk: The Imperative for Educational Reform (Washington, D.C.: U.S. Department of Education, 1983).
- 7. National Center for Education Statistics, Digest of Education Statistics (2012), Table 199: 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; and idem, Digest of Education Statistics (1996), Table 152: State Requirements of High School Graduation, in Carnegie Units, 1980 and 1993.
- 8. Center on Education Policy (CEP), State High School Exit Exams: Trends in Test Programs, Alternate Pathways, and Pass Rates (Washington, D.C., 2009), 16; and idem, State High School Tests: Changes in State Policies and the Impact of the College and Career Readiness Movement (Washington, D.C., 2011), 4.
- 9. National Center for Education Statistics, Digest of Education Statistics (2011), Table 159: 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.
- 10. Iris Weiss, Report of the 1977 National Survey of Science, Mathematics, and Social Studies Education (Research Triangle Park, N.C.: Center for Educational Research and Evaluation, 1978), Table 25: Horizon-research. com/2012nssme/wp-content/uploads/2013/02/1977-Report.pdf.
- 11. 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," American Scholar 56, no. 3 (summer 1987): 343-354.
- 12. Basal readers are textbooks used to teach reading and have, for many years, served as the spine of the reading curriculum.

- 13. William Schmidt et al., "Educational Content of Basal Reading Texts: Implications for Comprehension Instruction," Research Series no. 131, Institute for Research on Teaching, Michigan State University (February 1983), 10.
- 14. Ibid., 16.
- 15. Thomas B. Fordham Institute, "The State of State Science Standards 2012" (Washington, D.C., 2012), 126.
- 16. Sheldon M. Stern and Jeremy A. Stern, "The State of State U.S. History Standards 2011" (Washington, D.C.: Fordham Institute, 2011), 68.
- 17. Kate Walsh, "Basal Readers: The Lost Opportunity to Build the Knowledge That Propels Comprehension," American Educator (Spring 2003): 24.
- 18. Common Core is an independent advocacy group unconnected to (though supportive of) the Common Core State Standards. See also Learning Less: Public School Teachers Describe a Narrowing Curriculum (Washington, D.C.: Common Core, 2012). The data used here are from cross-tabulations that are not included in the public report but were provided by Common Core.
- 19. It is important to note that 53 percent of these elementary teachers believe that, as a result of the extra attention and resources, 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 trade-offs. These trade-offs 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—math and English, plus all the rest. "All the rest" simply does not get a lot of attention in American elementary schools.
- 20. E. D. Hirsch, Jr., "Building Knowledge: The Case for Bringing Content into the Language Arts Block and for a Knowledge-Rich Curriculum Core for all Children," American Educator (Spring 2006).
- 21. Common Core State Standards, 33.
- 22. Ibid., 10.
- 23. Fordham Institute, "The State of State Science Standards"; and Stern and Stern, "The State of State U.S. History
- 24. Core Knowledge Sequence: Content and Skill Guidelines for Grades K-8 (Charlottesville, Va.: Core Knowledge Foundation, 2013).
- 25. Core Knowledge: English Language Arts (Charlottesville, Va.: Core Knowledge Foundation, 2013).
- 26. CEP, An Overview of States' Progress and Challenges: Year 3 of Implementing the Common Core State Standards, 2.
- 27. Stephen Sawchuck, "Retooled Textbooks Aim to Capture Common Core," Education Week (November 13, 2012).
- 28. Diane August et al., Treasures: A Reading/Language Arts Program (New York: Macmillan/McGraw Hill, 2011); James Baumann, Journeys: Common Core (Orlando, Fla.: Houghton Mifflin Harcourt, 2014); and Peter Afflerbach et al., Reading Street: Common Core (Upper Saddle River, N.J.: Pearson Education, 2013).
- 29. Kate Walsh, 2003.
- 30. If a piece of content appeared first in the second semester textbook, and again in that textbook, that content would not get picked up in this study.

- 31. Afflerbach et al., Reading Street.
- 32. August et al., Treasures.
- 33. Baumann, Journeys.
- 34. Jennifer McMurrer and Matthew Frizzell, Year 3 of Implementing the Common Core State Standards: State Education Agencies' Views on Postsecondary Involvement (Washington, D.C.: CEP, 2013); Diane Stark Rentner, Year 3 of Implementing the Common Core State Standards: States Prepare for Common Core Assessments (Washington, D.C.: CEP, 2013); Diane Stark Rentner, Year 3 of Implementing the Common Core State Standards: An Overview of States' Progress and Challenges (Washington, D.C.: CEP, 2013); Nancy Kober et al., Year 3 of Implementing the Common Core State Standards: Professional Development for Teachers and Principals (Washington, D.C.: CEP, 2013); and Moses Palacios et al., Implementing the Common Core State Standards: Year Two Progress Report from the Great City Schools (Washington, D.C.: Council of the Great City Schools, 2013).
- 35. The Council of the Great City Schools has also surveyed its member districts on CCSS implementation. Based on that survey, it seems unlikely that more than a few districts are substantially revamping their curricula.
- 36. See http://www.engageny.org/english-language-arts.
- 37. E.g., in New York State, the Core Knowledge curriculum provided for grades K-2 is complemented by model units for grades 3-5 produced by expeditionary learning; these include content from the state's history and science standards—but not all of it, making it hard for teachers (or students) to assemble the puzzle.
- 38. Common Core, The Wheatley Portfolio and The Alexandria Plan.

There Are No Shortcuts: Mending the Rift between **Content Knowledge and Deeper Learning**

by Robert Pondiscio

Skill is knowledge. There are no shortcuts. - E. D. Hirsch, Ir.

Is any field more plagued by false dichotomies than education?

Combatants in the math wars battle over whether children need computational skills or conceptual understanding, when, in the real world, both are needed. The lifelong love of reading and "authentic" writing so prized by whole-language enthusiasts surely is not damaged by instruction in grammar or phonics; we needn't choose one or the other. Direct instruction or "student-centered" pedagogy? The act of teaching itself: Is it an art or a science? Yet of all the false choices we make in education, or foolishly believe that we must make, few are more vexing than the choice between content knowledge and "deeper learning." It is not merely a false choice, but no choice at all. Indeed, it is closer to correct to describe the choices as two sides of the same coin.

Still, we persist in seeing knowledge as negotiable, fungible, and dispensable—mere grist for the mill. "Education is not the filling of a pail but the lighting of a fire," goes a popular education homily, commonly (and mistakenly) attributed to William Butler Yeats. The implication is clear and unsubtle: As teachers, we have far more important things to do than stuff kids' noggins full of nonsense. This inspiring but empty bromide does violence to the critical role of knowledge, the stuff in the pail, to every meaningful cognitive process prized by fire lighters, including critical thinking, problem solving, and creativity. Dichotomies don't get more false than between knowledge and deeper learning. You can't light a fire in an empty pail.

Not only are there no legitimate grounds for presenting knowledge and skills as opposing ideals; cognitive science makes it abundantly clear that even conceiving of content knowledge and deeper learning as in any way separate and distinct invites fundamental misconceptions that can only affect teaching and learning adversely.

In this paper, we explain the need for a rich and rigorous, content-based education as the indispensable foundation of teaching for deeper learning, and we suggest ways to end the mutually destructive conflict between two views of education that should embrace each other as mutually reinforcing.

The Case for Content

The cause of content knowledge as foundational to desirable education outcomes has long been championed by and associated with E. D. Hirsch, Jr., professor emeritus at the University of Virginia. His seminal 1983 essay, "Cultural Literacy," in the American Scholar argued that "the decline in our literacy and the decline in the commonly shared knowledge that we acquire in school are causally related facts." A book-length treatment of the same subject, Cultural Literacy: What Every American Needs to Know, was published in 1987 and struck an unexpected chord with the general public, remaining on the New York Times nonfiction best-seller list for six months.

In subsequent books, articles, and lectures, Hirsch has forcefully made the case that schools must teach a common, shared body of knowledge across the curriculum to build vocabulary, raise verbal competence, and serve the cause of social and economic justice. In 1986, Hirsch established the Core Knowledge Foundation to create curriculum materials built upon his work and insights. The foundation publishes educational books and materials, provides professional development for educators, and supports a growing network of Core Knowledge schools, many of which commit to teaching the Core Knowledge Sequence, a detailed outline of content in language arts and literature, history and geography, mathematics, science, music, and the visual arts from preschool through the eighth grade.

Hirsch's fundamental case for a common curriculum is rooted in his observation that cognitive skills like critical thinking, problem solving, and, especially, reading comprehension are not content-neutral, transferable skills that can be taught, practiced, and mastered in the abstract. Once students can decode text fluently, their ability to comprehend a reading passage is largely a function of making correct inferences, a process that depends heavily on background knowledge and vocabulary shared between author and reader. Unlike throwing a ball or riding a bike, Hirsch argues, reading comprehension is not a transferable skill that can be applied to any text.

A deep research base validates Hirsch's essential argument, demonstrating that "poor" readers are often stronger than "good" readers when reading about topics that they know a lot about and where good readers lack the same knowledge. In a landmark study by Recht and Leslie,² a group of junior high school students—half of whom had been identified by standardized tests as "good" readers and the other half as "poor" readers—were asked to read a passage about a baseball game. The ostensibly poor readers with deep background knowledge of baseball easily outscored the good readers with low levels of knowledge on a test of their comprehension, effectively demonstrating the enabling role of background knowledge in reading with understanding. Even more pertinent, the struggles demonstrated by the good readers in the study underscore the difficulty that all students face when confronted with unfamiliar content.

This connection between content knowledge and cognition is the soul of Hirsch's work and is essential to understanding his insistence on teaching a shared body of common content from the earliest days of school. In books, speeches, and articles, he frequently invokes the "Matthew Effect," a term coined by University of Toronto cognitive scientist Keith Stanovich, to describe the process by which students increase—or do not increase—their vocabulary, reading comprehension, and other cognitive processes. The name comes from a passage in the Book of Matthew: "For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath."

Knowledge and verbal proficiency are intimately intertwined. "Those who are language-poor in early childhood get relatively poorer, and fall further behind, while the verbally rich get richer," Hirsch observes. 4 Thus the achievement gap is best understood as a knowledge gap—if you want kids to read with understanding, you have to increase their store of knowledge across a wide variety of domains. Core Knowledge schools seek to address this through a rich, rigorous curriculum in history, geography, science, math, art, and music.

Over the years, critics have frequently attacked Hirsch's concept of cultural literacy as "aimed at preserving the intellectual domination of white Anglo-Saxon males, and as a means of boring children with mindless drills and stuffing them with 'mere facts.' "5 The topics described in the Core Knowledge Sequence, however, are not arbitrary, let alone a function of Dr. Hirsch's race, privilege, or preference. It was the result of a lengthy and rigorous process of research and consensus-building among subject-matter specialists, state departments of education, and professional organizations, including the National Council of Teachers of Mathematics and the American Association for the Advancement of Science.⁶ An advisory board on multiculturalism sought to ensure that the Sequence represented cultural diversity before the entire project was vetted by independent groups of teachers, scholars, and scientists. The resulting draft Sequence was further refined at a national conference of teachers and subject specialists and published for the first time in 1990. Shortly thereafter, Three Oaks Elementary School in Fort Myers, Florida, became the nation's first Core Knowledge school. Today, more than 1,200 schools teach all or part of the Core Knowledge Sequence. Parents who have never heard of E. D. Hirsch, Jr. have eagerly snapped up copies of the What Your... Grader Needs to Know series, based on the content detailed in the Core Knowledge Sequence. More than 3 million copies have been sold in the last twenty years. Today, the Common Core State Standards in English language arts, adopted by all but a small number of states, while not curriculum at all, bear Hirsch's unmistakable thumbprint. "By reading texts in history/social studies, science, and other disciplines," the Standards advise, "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." This is as economical an expression of Hirsch's central argument as one is likely to encounter.

The Sequence is intended to outline for curriculum writers, publishers, teachers, and parents the academic content of a sound, basic education through the eighth grade. It serves to describe, but not dictate, a relatively stable foundation of common knowledge, sayings, and idioms, as well as well-known works of art, music, and literature. This is a crucial distinction. Hirsch's Cultural Literacy and the Core Knowledge Sequence that it begat are not attempts to impose a canon on schools. Rather, they are a curatorial effort aimed at ensuring that all students possess the language and background knowledge that literate speakers and writers take for granted that their listeners and readers know. Hirsch's enduring insight is that gaps in shared knowledge cause language comprehension to break down. For low-income and minority learners in particular, the soul of Hirsch's work is summed up by the title of his 2006 book, The Knowledge Deficit, in which he marshals compelling evidence to illustrate how the achievement gap is actually a knowledge gap. The lack of a coherent, knowledge-rich curriculum in our schools depresses student achievement because the "skill" of language proficiency rests on a foundation of shared knowledge. Affluent children's success in school is disproportionately a function of educated and verbally proficient parents, opportunities for travel and enrichment, and similar advantages. Hirsch's most profound insight is to note that disadvantaged children are what might be termed "school-dependent" learners. When they are not given access to the same broad, general knowledge as their advantaged peers, they do not—indeed, cannot—achieve at the same level.

These deeply egalitarian impulses and progressive ends have not stopped attacks on Hirsch and Core Knowledge from critics aligned with the traditions and preferences of progressive education. Alfie Kohn, an author, lecturer, and virulent critic of education reform efforts, has made illinformed sport of Hirsch's work repeatedly over the years, deriding it directly or indirectly as "rote learning" or a "bunch o' facts" to be memorized.

I have no objection to teaching kids what the Magna Carta was, or even to having them know approximately when it was written. But if they don't have a feeling for why it was written, how it was received, why it matters when it was written, if they don't have an opinion about its contents, if it's taught in such a way that they have no reason to care about any of this, then what's the point? To prepare them for an appearance on Jeopardy?7

The lampooning of Hirsch's work as trivial pursuit, rote learning, or lists of disconnected facts to be memorized is a common misconception almost certainly stemming from Cultural Literacy itself. The book gained national attention largely as a result of its list of 5,000 things that "every American needs to know," which sparked a lively debate over what was included and what was left out. But the debate, which made Hirsch famous and his book a best-seller, tended to obscure his unassailable, central point: Understanding even fairly simple texts requires a reader to command a common set of sophisticated words, allusions, and the ability to make inferences

correctly, all of which rest on background knowledge shared by the reader and the writer—and least apt to be acquired, without the school's purposeful efforts, by children from disadvantaged backgrounds. This fundamental disconnect led University of Virginia professor of psychology Daniel Willingham to describe Cultural Literacy as "the most misunderstood education book of the last fifty years."8

Willingham draws an important distinction, largely unappreciated by Hirsch's critics, between "rote" knowledge and "inflexible" knowledge. For example, a student who renders the definition of the equator as "a menagerie lion" rather than "an imaginary line," is demonstrating how a bit of information can be reduced and memorized at the level of sounds, without any meaning or sense. Rote learning, Willingham notes, is not (as Hirsch's critics might complain) decontextualized facts or knowledge. A more helpful definition might be "memorizing form in the absence of meaning."

"Rote knowledge" has become a bogeyman of education, and with good reason. We rightly want students to understand; we seek to train creative problem solvers, not parrots. Insofar as we can prevent students from absorbing knowledge in a rote form, we should do so....But a more benign cousin to rote knowledge is what I would call "inflexible" knowledge. On the surface it may appear rote, but it's not. And, it's absolutely vital to students' education: Inflexible knowledge seems to be the unavoidable foundation of expertise, including that part of expertise that enables individuals to solve novel problems by applying existing knowledge to new situations—sometimes known popularly as "problem-solving" skills.

Clearly, rote learning is not a goal prized by Hirsch or other advocates of a knowledge-rich curriculum. But neither is the mere accumulation of a "bunch o' facts." Knowledge is a means to many ends, including those prized by advocates of deeper learning.

What Is Deeper Learning?

"Those with a rich base of factual knowledge find it easier to learn more—the rich get richer," Willingham wrote in a 2006 essay, "How Knowledge Helps," in The American Educator. "In addition, factual knowledge enhances cognitive processes like problem solving and reasoning. The richer the knowledge base, the more smoothly and effectively these cognitive processes—the very ones that teachers target—operate."10

There is no serious disagreement that the outcome of a sound, basic education should be students who can solve problems, think critically, collaborate, communicate effectively, and function as informed and effective citizens. Neither is there anything new or novel about these desired outcomes. However, in recent years, this time-honored suite of competencies has been rebranded

"21st Century Skills" and, more recently, "deeper learning." What exactly is "deeper learning"? For the purposes of this discussion, we will adopt the definition offered by the National Research Council's Committee on Defining Deeper Learning and 21st Century Skills:

We define "deeper learning" as the process through which an individual becomes capable of taking what was learned in one situation and applying it to new situations (i.e., transfer)....The product of deeper learning is transferable knowledge, including content knowledge in a domain and knowledge of how, why, and when to apply this knowledge to answer questions and solve problems....While other types of learning may allow an individual to recall facts, concepts, or procedures, deeper learning allows the individual to transfer what was learned to solve new problems.11

Note that this definition in no way conflicts with Willingham's observation that knowledge is the "unavoidable foundation of expertise" that "enables individuals to solve novel problems by applying existing knowledge to new situations." Conflict between the two is possible only if one fails to appreciate the role of knowledge as the wellspring of skills. Deep knowledge and deep learning are conjoined twins; they cannot be separated.

Advocates of deeper learning have tended to argue that while mastery of academic content is important, the goal is to prepare students to apply their knowledge in "real life." Critical thinking, collaboration, and communication are seen as essential outcomes, as is the ability of students to direct their own learning and demonstrate habits of mind such as resilience or grit. "Students are expected to be active participants in their education," notes the website of the Hewlett Foundation, a champion of educating for deeper learning. "Ideally, they are immersed in a challenging curriculum that requires them to seek out and acquire new knowledge, apply what they have learned, and build upon that to create new knowledge."12

In this way, deeper learning advocates, perhaps more than content knowledge advocates, raise the bar for teachers and condemn "the typical worksheet, drill-and-memorize, and test preparation approach to classroom teaching." The gold standard for classroom teachers is instructional methods that "require students to use important information repeatedly in complex and meaningful ways such as writing papers or completing projects."13

Like content knowledge, deeper learning is not without its detractors. "In the past century, several alternatives have arisen to dethrone the prominent role of knowledge in schools: project-based learning, inquiry and discovery learning, higher-level thinking, critical thinking, outcome based education, and 21st-Century Skills. Now it is deeper learning," observes Brookings' Tom Loveless, who cautions educators and policymakers to approach deeper learning with skepticism:

These ideas represent a variety of approaches to curriculum and pedagogy. They are not all the same, but they share one characteristic. All are advertised as transcending, and therefore superior to, academic content organized within traditional intellectual disciplines. It is not enough for students to know the major events of U.S. history, for example, but to be able to critically analyze the histories, any history, that one studies. Knowing about science is inferior to doing science. It is less important to learn the algorithms and articulated procedures of mathematics than to apply them in real world contexts while solving real world problems. 14

As Loveless implies, the principal threat to deeper learning is how easily it can be reduced to a fad or scuttled by ill-conceived or sloppy implementation. Worse, it can become the plaything of self-interested parties in educational technology, publishing, or teacher professional development. Less thoughtful cheerleaders for deeper learning and twenty-first-century skills have done their cause a disservice among more sober analysts with oft-repeated claims, for example, that "the store of human knowledge doubles every five years" and will double every seventy-two days by 2020, or that 90 percent of the jobs our children will do for a living haven't been invented yet.¹⁵ The thrust of such overheated and unverifiable claims is that a content focus is a fool's errand in our schools; twenty-first-century skills should be our paramount concern. This strictly utilitarian view of schooling completely neglects Hirsch's view of knowledge as essential for language proficiency and displays a self-defeating disregard for the essential work of patient and coherent knowledge-building as a means to the ends prized by deeper learning enthusiasts.

Love and Marriage

While no one seriously disagrees that "higher-order thinking skills" are the best possible outcome of a good education, poorly implemented skills-focused, "content lite" schooling can serve no good end. It will compromise literacy achievement and most seriously damage the prospects of low-income students and children of color, who can least afford the weak tea of a watered-down curriculum. But the greatest stumbling block to deep learning is the nature of the thing itself. Can critical thinking actually be taught? "Decades of cognitive research point to a disappointing answer: Not really," observes Willingham:

The processes of thinking are intertwined with the content of thought (that is, domain knowledge). Thus, if you remind a student to "look at an issue from multiple perspectives" often enough, he will learn that he ought to do so, but if he doesn't know much about an issue, he can't think about it from multiple perspectives. You can teach students maxims about how they ought to think, but without background knowledge and practice, they

probably will not be able to implement the advice they memorize. Just as it makes no sense to try to teach factual content without giving students opportunities to practice using it, it also makes no sense to try to teach critical thinking devoid of factual content.¹⁶

In short, content knowledge and deep learning are like love and marriage; you can't have one without the other. To be fair, well-informed observers seldom argue for teaching content without application or practice—or teaching critical thinking devoid of factual content. It is more common for content knowledge and deeper learning advocates simply to talk past each other.

For example, if a teacher wants to teach a skill like comparing and contrasting, she might ask her students to fill out a Venn diagram. One group of students might compare and contrast deserts and tundra; others will look at igneous and sedimentary rock; still others might examine the two houses of Congress. A content advocate will look at this activity and conclude that the teacher is indifferent to building knowledge. A skills advocate will look at the same activity, see children engaged with geography, geology, and civics, and see respectful attention being paid to academic content.

In a skills-oriented classroom, content is content is content. It's a mere delivery mechanism for the skill. It could just as easily be apples versus oranges or baseball versus football, since the outcome that matters is the skill. If the domain knowledge drives the instruction, however, the compareand-contrast exercise might be an organic part of a unit on colonization, perhaps asking students to compare English and Spanish settlements in the New World; or embedded within a civics unit on the separation of powers in the federal government; or the differing views of government described by John Locke and Thomas Hobbes. The skill serves as a way of thinking about and organizing the content, which is seen as intrinsically important, not mere grist for the mill.¹⁷

This is not a trivial difference. Those who favor rigorous, knowledge-rich curriculum must make the case for a clearly defined, sequenced core curriculum for many reasons: it boosts reading comprehension by building background knowledge. Hirsch has argued that it eliminates gaps and repetitions and helps address issues associated with student mobility and offers context that will make deeper learning not merely possible but relevant and meaningful to students. Without an agreed-upon sequence, a student might end up studying the rain forest three times in elementary school and the Bill of Rights never, for example. Building broad background knowledge should be viewed as a necessary, but not sufficient, condition to encourage critical thinking and problem solving. The absence of a coherent, sequenced curriculum risks superficiality, gaps, repetition and confusion, which, in turn, make deeper learning less likely to gain traction.

Grant Wiggins, an education researcher and author of the influential book *Understanding by* Design, acknowledges that content is essential to skill but argues that "the mistake that people make is they take that argument and they run with it way too far. 'First you have to learn a whole bunch of stuff. No, that doesn't follow," he notes. "In fact, you learn a bunch of stuff by trying to use what you know. That dynamic is to me the essence of learning. It's not the information; it's the transfer of the information."18

In fairness, neither Hirsch nor the Core Knowledge Foundation has ever insisted that a body of knowledge must be taught before it can be applied. Wiggins's curriculum work is even featured in the foundation's professional development workshops for teachers. But the misconception is instructive and illuminates the distrust and suspicion that can flare up between advocates for content knowledge and those for deeper learning.

The fallacy that must at all costs be avoided is to conceive of thinking skills as independent of content, since this would lead teachers to conclude that students can learn, practice, and master these skills by interacting with any content whatsoever.

Bridging the Divide

In the spirit of détente, let us simply concede that advocates for content knowledge and deeper learning have misunderstood and needlessly antagonized each other: Advocates for a contentrich education are dismissive of deep learning; those who prize skills such as critical thinking, problem solving, and cognitive skills are indifferent to content and fail to place content at the heart of those skills. How were these clearly compatible learning outcomes set in opposition to each other in the first place?

Teachers cannot be blamed if the word "mere" has become a frozen epithet affixed to the word "knowledge." Bloom's celebrated Taxonomy places knowledge, defined as "the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting," at the lowest level of sophistication, implying that merely knowing stuff matters less than the ability to analyze, evaluate, or synthesize information. "It is difficult to identify a more powerful influence on the American school curriculum, and perhaps curricula worldwide, than Bloom's Taxonomy," observes Loveless. 19 A nuance-averse interpretation of Bloom's leads to encouraging teachers to "up the rigor" of their questions and assessments, while giving short shrift to the role of knowledge in supporting rigorous thinking. One teacher recalls being told after an observation that it was important "not to 'spoon-feed them knowledge' and instead, 'get them evaluating higher up Bloom's taxonomy.' It seemed almost universally acknowledged that learning facts was passive, dull and unhelpful."20 It is less commonly observed but equally true that in the absence of rich factual knowledge, higher-order thinking will be superficial or simply wrong.

Standards and assessments also tend to reinforce the idea that knowledge is negotiable and dispensable while thinking skills are paramount and essential. Standardized reading tests are designed to be content-agnostic—a fiction regularly and carefully debunked by Hirsch, who has described such assessments as "de facto tests of background knowledge." Feedback to teachers on student performance on standardized tests invariably focuses on the skills—making an inference or finding the main idea, for example—that a student got wrong, rather than the content of the reading passages on the exam. But a student who cannot make correct inferences about a passage in an unfamiliar domain may do so with ease if the passage is about a familiar subject.

It is a common complaint (and a fair one) that high-stakes testing has come to dominate schooling. It is less commonly observed that much of the effort that goes into helping students prepare and practice for tests is misguided and even counterproductive. Reducing reading comprehension, for example, to skills such as "making inferences" and "finding the main idea" reinforces the mistaken idea that such skills are content-neutral.

"Inference-making is not purely formal process," Hirsch observes. "When the skill fails it's usually because information is lacking. Inference-making can be described as supplying missing premises from one's own prior knowledge in order to complete a kind of syllogism. The purely transferable elements of thinking skills turn out to be minor elements that are easily acquired. What really counts is relevant knowledge about the problem at hand."22

The bottom line is that being an effective or a creative thinker in one domain does not make you skilled in another. "The how-to elements of creativity, problem solving, language comprehension, and critical thinking are far, far less important than domain-specific knowledge,"²³ Hirsch notes.

Similarly, English language arts standards typically describe the reading "skills" that students must be able to demonstrate, not academic content, furthering the mistaken impression that content and skills are disconnected. Common Core State Standards (CCSS) English language arts "anchor standards" in reading, for example, require that students be able to "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." Which texts? Which knowledge domains? CCSS does not say. However, the guidance to adopting states as districts is clear and unambiguous: [W]hile 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, contentrich curriculum consistent with the expectations laid out in this document [emphasis added].24

The important business of creating or adopting a "well-developed, content-rich curriculum" is left to districts, schools, and individual teachers—an enormous and potentially ill-considered leap of faith. Standards are not curriculum. As long as reading tests attempt to assess students without controlling for background knowledge, such tests will always favor those whose out-of-school experiences gives them an advantage, or whose education provided a firm foundation across subjects. And teachers will likely persist in the vain effort of attempting to detach cognitive skills like reading comprehension, critical thinking, and problem solving from enabling knowledge domains.

In sum, where well-intentioned experts, including cognitive scientists, see a clear and obvious link between content knowledge and higher-order thinking skills, the practical realities of the classroom, including standards and assessments, tend to conspire against a comprehensive view, tacitly encouraging teachers to treat knowledge and deeper learning as separate and distinct. Neither side is well served.

Teaching for Transfer

If the false dichotomy between knowledge and skills is baked in to teacher training, reinforced by standards and assessments, it will remain a challenge to move the field beyond its well-established patterns of thinking. The first and most important step toward making deeper learning a credible outcome of schools is for all parties in education, from practitioners to policymakers, to come to terms with just how difficult it is to "teach for transfer" and stop looking for shortcuts. It is certainly true that we cannot train the mind to master deeper learning in the abstract as a transferable set of mental muscles. The best we can do is to create the curricular and pedagogical conditions that most favor the transfer of knowledge. Experts suggest several practical steps teachers can implement, including extensive use of examples to teach abstract concepts, making a concerted effort to build background knowledge, and perhaps most important, keeping in mind the useful distinction between rote and inflexible knowledge. Educators, policymakers, parents, and, especially, advocates for deeper learning would do well to consider Willingham's simple advice:

Remember that...knowledge is a natural step on the way to the deeper knowledge that we want our students to have....Frustration that students' knowledge is inflexible is a bit like frustration that a child can add but can't do long division. It's not that this child knows nothing; rather, he doesn't know everything we want him to know yet. But the knowledge he does have is the natural step on the road to deeper knowledge. What turns the inflexible knowledge of a beginning student into the flexible knowledge of an expert seems to be a lot more knowledge, more examples, and more practice.²⁵

A healthy skepticism about broad claims for deeper learning is in order. Educators must be vigilant in resisting quick fixes that minimize the critical role of domain knowledge and expertise in deeper learning. Suggestions that we want students to "think like scientists" or "read like historians" are unhelpful. If we fail to appreciate how large stores of scientific or historical knowledge are an essential building block of expertise, we will continue to serve students poorly.

For their part, content advocates must take seriously the observations of critics who worry that a knowledge-rich curriculum, delivered less than skillfully, can be a dull and dispiriting slog for students. For older students, particularly, more opportunities to apply knowledge in self-directed, deep learning experiences would make school relevant at an age when students are increasingly disaffected and wondering, "Why do I need to learn this?" Likewise, advocates for projectbased learning and other forms of inquiry learning might acknowledge that their preferred modes of instruction, however engaging, will bear sweeter fruit in middle and high school if the pedagogical practices that they prize rest on a sturdy foundation of knowledge and if students arrive in their classrooms with less diversity of preparation.

Finally, advocates for a content-rich curriculum might advance their cause by emphasizing the need not just for content but for a coherent approach to knowledge-building as a means to enhance the "stickiness" of deep learning and to clear up persistent misconceptions.

Conclusion

Effective people have gained 21st-century skills because they have knowledge in a wide range of domains. This turns out to be the only answer consistent with a massive body of evidence.

—E. D. Hirsch, Jr.

Given the rapid advance and acceptance of the Common Core State Standards, the broad demand for skilled critical thinkers from business, politicians, and even parents, and the well-intended impulses of mainstream educators, we can anticipate that the demand for deep learning as an educational outcome is unlikely to be deterred. Getting there, however, will require accepting the firmly established role of content knowledge as foundational to cognitive skill. What is missing is a consensus on the foundational knowledge most conducive to deeper learning and the role of schools in ensuring that they get it.

This line of thought quickly leads to a foreseeably difficult and thankless task. It is easy and not politically difficult to describe the cognitive skills that we want students to demonstrate. No one will seriously object to reading comprehension, critical thinking, or problem solving as desirable ends of education. Articulating the specific knowledge domains, works of art, or literature needed to achieve those broad goals invites controversy, to put it mildly. Progress, as Hirsch himself argued, "is going to take us inexorably, from a comfortable vagueness to a thankless and uncomfortable specificity regarding the content we teach our students."26

There is broad, general agreement on knowledge as the operating system for deeper learning. There is also broad general agreement that deeper learning, not mastery of a body of content, is the true goal of a well-trained mind. The unresolved conflict is whether we are willing to insist on "uncomfortable specificity" of curricular content. While the desirability of "teaching for transfer" is clear and obvious, we have not, in the main, created the curricular conditions necessary to accomplish that goal. "Teaching for transfer within each discipline aims to increase transfer within that discipline....Research to date provides little guidance about how to help learners aggregate transferable competencies across disciplines. This may be a shortcoming in the research or a reflection of the domain-specific nature of transfer."27

It's almost certainly the latter.

Standards—even de facto national standards—in the English language arts are not sufficient. It is simply too much to expect that common standards will be met without common content and assessments that reward them. In their absence, the wish for deep learning remains largely aspirational.

One solution to the problem of deeper learning may be simply to adopt a standard core curriculum in elementary school through fifth grade and accountability measures that reward teaching it. Hirsch has long championed this idea, and his Core Knowledge Sequence describes in detail the curricular content from preschool to eighth grade. However, he has also argued that alternative sequences are possible, and even desirable. The foundational nature of knowledge as well as high student mobility rates argues strongly for a prescribed body of curricular content at least until the fifth grade and perhaps through the eighth grade for students in schools and districts that serve high concentrations of low-income students. Any state or school district that is serious about meeting standards needs to establish a curriculum of "thankless and uncomfortable specificity" if the deeper-learning goals of the standards are to be attained.

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Building Teacher Enthusiasm for Core Knowledge

by Steve Farkas and the FDR Group

Introduction

The Thomas B. Fordham Institute commissioned the FDR Group to gather insights about how to communicate more effectively with elementary school teachers about Core Knowledge. As Core Knowledge appraises how far it has come and what needs to be done going forward, we conducted four focus groups to better understand the views and reactions of teachers toward the basic principles of this education initiative.

Our discussions with teachers began with their starting point: their vision of teaching and learning, their understanding of what a properly educated youngster knows, their approach to instruction, and their take on where their schools are today. We pushed them to wrestle with conflicting values and approaches. We probed to see which messages regarding Core Knowledge resonate, which are counterproductive, and which don't seem to matter.

We do not believe that there is some magical combination of words and phrases that can "sell" an idea when these words are not connected to the essence of the idea itself—or to the interests and priorities of those listening. Substance matters. But knowing how to present substance also matters. We hope that what we learned about how teachers think about this issue will make a difference in that presentation. As Benjamin Franklin once said, "An investment in knowledge pays the best interest."

Executive Summary

The focus group research reveals that Core Knowledge is built upon principles that hold considerable innate appeal to teachers. Several of the key elements that resonate most with them:

- Its focus on content—most teachers inherently believe that teaching knowledge is crucial and favor a curriculum that strikes a balance between content and skills.
- Its focus on delivering a broad, well-rounded education. Teachers are profoundly disappointed in what they see as the current narrowing of the curriculum. Core Knowledge offers an antidote.
- Its "scaffolding" approach to teaching. Teachers believe that students learn best by building atop what they already know and can do. And, since Core Knowledge does not dictate pedagogy, it avoids that source of resentment.

 The advent of the Common Core State Standards. With these broad standards established across much of the land, many teachers are looking for specific guidance on curriculum content that is compatible with Common Core, brings it alive, and renders it teachable.

The research also reveals some nontrivial worries among teachers regarding Core Knowledge (and other preset curricula). These include:

- Concerns about what gets on the must-learn list of knowledge and who will choose it. Teachers worry that non-educators with non-educational motives will do the choosing.
- The challenge of name recognition. Core Knowledge—the idea and the term—is virtually unknown among ordinary teachers. What's more, the term "Core Knowledge" is itself too easily confused with the term "Common Core."
- A generalized reform fatigue among teachers, driving them to react with suspicion to any new initiative.

Observations drawn from one focus group conducted with current Core Knowledge teachers include:

- Making the shift to become a Core Knowledge school requires outstanding leadership that fosters cooperation among staff—especially because the curriculum can be intimidating at first.
- The teachers we interviewed were eager advocates. They recommend full implementation of the Core Knowledge curriculum, say they enjoy greater autonomy, and report that students and even their families become enthusiastic learners.

The report ends with suggestions for describing Core Knowledge in ways that put its best foot forward as it communicates with teachers, along with a recap of the attitudinal strengths and challenges facing the program.

Methodology

Focus groups are an ideal methodology to gauge audience receptivity or resistance to different messages and, in this case, to get at the "why" behind the reactions of teachers to Core Knowledge. The conversations were guided by an interview protocol but were also flexible, to allow the moderators to pursue promising insights. This is a report on the key themes that consistently emerged from the focus group conversations. Focus groups cannot be used to estimate percentages or to generalize to populations with calculable estimates of error. Instead, they are useful for capturing the language, trajectory, and dynamics of people's thinking.

Our explicit purpose was to use traditional marketing research techniques to come up with practical communications advice for Core Knowledge that could be used with teachers across the country. To that end, one group took place in the Atlanta area and consisted of teachers working in city and suburban schools; another was in the St. Louis area and drew teachers from suburban, rural, and inner-city schools. Two groups took place in New York City: the teachers in one group were from elementary public schools across the city (Manhattan, the Bronx, Brooklyn, or Queens); the teachers in the second group were all from a Core Knowledge school in Queens. We interviewed forty-two elementary classroom teachers in all. Their demographic characteristics were varied: they worked in a variety of grade levels; they had a range of teaching experience, from newcomers to veterans; and they were diverse ethnically and racially. As one might expect, only a handful of the participants were male. Teachers were not recruited to conform to a predetermined view of any kind; no attitudinal questions were asked in the recruiting for the focus groups.

Support for Teaching Content is Widespread

In the broadest sense, making the case to teachers that knowledge is important is not difficult. Most teachers came to the focus groups with an inherent appreciation for the value of students having some points of knowledge at their fingertips—even if it occasionally involved memorization. Not one of our focus group participants was acquainted with the term "Core Knowledge" (except, of course, the teachers from Queens). But teachers were easily able to articulate the reasons they believed that students need to learn specific knowledge and fundamental content.

Knowledge and Facts Are Important

One of the first tasks we gave teachers was to respond to the statement that "kids should learn how to learn; facts and figures and dates are not that important, especially in the age of Google." But teachers instinctively pushed back at this definition of education precisely because it downplayed learning facts. Instead, they wanted balance. Teachers believe that there are points of fact and knowledge that children need to learn and that they need to teach their pupils.

"I know with math, one of the biggest things is the number sense. Not being fluent in your facts is just a disservice to children, and I hate that we're moving away from it. I feel it's almost like whole language—when they said spelling was not important, they'll figure it out. Well, they never figured it out." Atlanta

"Yes, they can definitely look it up, and they should know how to look it up, but they should have approximate dates. They should know the years in which World War II happened, and they need to know the approximate dates of the Depression. They can't think that it was in recent times." New York City

"Content knowledge is important. I mean, they have to know how to add and subtract. And they have to know that certain things happened in history. And they have to know vocabulary that has to do with science." St. Louis

"I just don't think it's unreasonable to teach kids, even at age five, who is your president. I think it's important to be able to hold a conversation—even as a kid—and know things." Atlanta

One of the four focus groups was conducted with teachers in a Core Knowledge school in Queens, New York. Responding to the same question challenging the need for facts in the age of Google, a teacher there challenged the presumption that technology is used effectively. She said, "Children use this technology for games, not for academics. The iPad: if you observe the kids, they are not calculating answers or Googling what is the capital of the state. They're playing games." And sometimes technology fails: "When they go to the grocery store, they need to know when the computers are down whether or not they're getting the right change," said a St. Louis teacher.

To be sure, several teachers were keen to emphasize skills and downplay content. Responding to a conversation about reading To Kill a Mockingbird, one teacher said:

"I don't know about a book. Obviously, some kind of work that touches on figurative language that they have to be able to understand. But I don't necessarily think it has to be a book. There's theories where you can teach similes and metaphors and personification. You have to have the exposures, but to say that every fifth-grader's going to read this book—no." St. Louis

But it is safe to say that virtually no teacher saw skills-versus-content as an either-or choice: Most simply thought that a balanced emphasis on skills and on content should be struck.

"I think they need both. I think that's crazy to think that they need one or the other. Anybody that might say that probably isn't an educator." St. Louis

"I believe teaching kids how to think—how to find and evaluate the answer. But I also believe that there are certain things that every kid should know. For instance, by the time you come to high school, you need to know that you live in the state of Georgia. But you ask some high school kids and they say Atlanta." Atlanta

By the way, teachers overwhelmingly preferred using the word "knowledge" instead of "facts" or "content" to describe the substance of what was taught. "Facts" seemed to point to simplistic learning, and "content" could be vague. "Knowledge" had the virtue of being clear as well as something elevated and inherently worth possessing.

Even Memorization Has Its Place

Although it was not their go-to strategy, even memorization had its place in the minds of teachers. Teachers spoke about memorization in somewhat apologetic terms, knowing that it was often frowned upon. Indeed, a Fordham/FDR Group survey of professors of education found just 36 percent saying that it is absolutely essential to "teach math facts such as memorization of the multiplication tables" in the early grades. So one might have expected it to become completely objectionable in the world of teaching and education. But to teachers, it's a technique that sometimes makes sense.

"Memorization isn't the ideal all the time, but there is a place for it. By the third grade, you need to memorize the multiplication table. You should limit memorization of words and the facts, but there is a place for it. And then you try to have them understand the concept." New York City

"In our preplanning, our principal was talking about spelling words, and there's a debate. Should you have kids memorize a spelling list? But I'm kind of old school and I think that kids should know how to spell basic words. Of course, we have word walls and personal word dictionaries. I just feel that memorization with some things is effective for kids to be successful, but it's just, you know, back and forth." Atlanta

Opportunities and Effective Arguments on Behalf of **Core Knowledge**

The formal presentation of Core Knowledge as a term and concept took place about midway through the focus groups. But most of its key principles had already been under discussion beforehand as we talked about pedagogical assumptions, how teachers define education, and how teaching had changed over time. And while the moderators came prepared to make the case for the value of Core Knowledge, many of the arguments on its behalf came spontaneously from the teachers themselves. We thus consider these messages to be especially promising in terms of effectiveness because they tap the preexisting mind-set of teachers.

Although we use the term "Core Knowledge" in writing about the findings below, many of the quotations preceded the formal presentation of the concept. And, as noted, few teachers had been previously acquainted with the term "Core Knowledge."

Building Blocks of Knowledge

Teachers have a core belief of their own: that students learn best when they are building upon previous layers of knowledge. The notion of progression and of building blocks as keys to learning is intuitive for teachers. Whether they've absorbed the utility of the "scaffolding" of knowledge from cognitive science or from their personal experiences, it is integral to how teachers think that teaching and learning work.

"When you look at each grade, the content knowledge that is built into that grade is essential. So by the time the child gets to the next grade, it's already assumed or guessed upon that I can teach this child this because what they learned from the year before." New York City

"I have a friend who teaches in a district in our county, and she said there's so many kids that come in to seventh grade that don't know their multiplication facts. So it's hard for her to teach the higher level math skills when they can't even do the basics. I absolutely do think that there's things that kids have to know." St. Louis

Meanwhile, teachers want to be able to assume that a level of learning has taken place by the time students first arrive in their classrooms so that they can move the kids forward. But they are often sorely disappointed.

"They should know to capitalize the word 'I,' yet I still have kids who don't capitalize their own name in third grade. I shouldn't have to tell you every day that you start a sentence with a capital letter." Atlanta

"As a third-grade teacher, I would feel comfortable knowing that my second-grade teachers were responsible for such and such and it was covered and it was taken care of. And those kids know, and assuming that I can start off on my third-grade year knowing that they know X and Y." Atlanta

An Antidote to the Narrowing of the Curriculum

Coming into the focus groups, teachers were already deeply troubled by the short shrift given to science, social studies, and the arts in their schools and classrooms. They will respond positively to Core Knowledge principles that define education expansively because it accords with how they define education. Core Knowledge can be seen as an antidote to the narrowing of the curriculum.

"I want broadening—more of a renaissance. I just think it's good to give them a taste of different things. You can still have a core curriculum—your reading, your writing, your arithmetic—but I like that kids are exposed to things and develop different interests. Otherwise, are we just going to have cookie-cutter people in America?" Atlanta

Although there is some amelioration of narrowing when they weave social studies and science into ELA, teachers are concerned that this is often an inadequate approach. When the key goal is reading, for example, teachers talked about how discussions of history have to take a backseat. And a subject such as science can require a hands-on approach impossible to get from reading.

"Now it's down to ninety minutes of social studies a week and 105 in science—and that's not counting when there's counseling or testing. We're like, oh, we won't do social studies today. So I think it's definitely decreased. And even though I try to integrate it, there's only so much I can do. When you're trying to do a whole lab and experiments and all that, you can't necessarily integrate that. And those have just gotten shorter and shorter." St. Louis

"We don't get to finish our science and social studies curriculum—at least, not in my school. Every year, we end up sweeping it under the rug because we have to cover all of the math topics. We have to make sure that we get every kid down for ELA. Because those are the subjects that are tested—and that's where we're evaluated, this school's evaluated, and the kids are evaluated." NYC

A Well-Rounded, Educated Person Is the Goal

Only a few teachers thought about knowledge in terms that were solely practical and instrumental. Those few argued that if knowledge was not crucial to your job, it was not crucial to learn it. "If you're not using it in your career, then does it necessarily matter? I hate to put it like that. But I don't think it does," said a New York City teacher.

But many more teachers held the opposite view. Theirs was a heartfelt belief that there are things that an educated, well-rounded person should know—regardless of the relevance of those things to career considerations. In New York City, a teacher quickly jumped in to respond to the above statement by her colleague, saying: "We're talking about somebody who is an educated person. I think there are certain things that they should know, whether or not it's relevant to their job. I'm not a politician, but I know something about how our government works. Because it helps society. You want an educated populace."

The sense that there are simply some points of knowledge that people ought to carry with them as they go through life—and that it is the schools' responsibility to provide them—was common and intuitive.

"There's just some basic things that to be considered educated, people should know. In order to be a successful citizen in this country there's just certain things you should just know. And to walk away when you graduate in your senior year, it's really a travesty when our kids don't even have basic facts." Atlanta

What It Means to Be American

The notion that students would need to know some things to make sense of what goes on in the nation's life—what the Supreme Court is and does, for example—was also clear. These teachers believed that knowledge of civics and citizenship ties Americans to their nation and to one another.

"We cannot be a society that doesn't know who Ben Franklin is, for gosh sakes!" St. Louis

"We should know basic things about this country. We should know the states, the capitals. We should know what the Supreme Court does because we live in this country. I believe in that core of knowledge in terms of our education of what this country does and where we've come from." New York City

"Part of the reason why so much of America is apathetic and doesn't participate in elections and things like that is because they don't have an understanding of the way things work. I do think that information can change behavior." Atlanta

"We're Americans. We should know about our country. I should know the fifty states like I know the back of my hand, and I should know who was the first president. I should know all that." New York City

Common Core Is an Opportunity

The advent of the Common Core State Standards has created a good opportunity for Core Knowledge. Most teachers in the focus groups had a positive view of the standards, but they now face the question: What should be the curriculum by which teachers assist their students to attain those standards? To the extent that Core Knowledge is seen as an answer, it will be responding to a clear need.

"I know how to teach. I know how to deliver it. Tell me what you want me to teach, and I can teach it, whatever it is. Tell me what you want. But the Common Core now is not telling me what they want. It's giving me a broad thing." Atlanta

"Being in a small district, I write my own curriculum. There's no team. You don't have anybody to bounce ideas off of. I think it's a struggle because I basically just have to pick and choose where I'm going to go." St. Louis

Teachers want to be left alone when it comes to how to teach—that's the most important thing to them and one of the virtues of Core Knowledge, in their eyes. They are open to guidance—and some are even open to total direction—on what to teach.

"Tell me what, not how." St. Louis

Some teachers in the focus group at a Core Knowledge school believe that their curriculum fits in nicely with the Common Core State Standards.

"I think Core Knowledge does help you meet the standards. When you get the tasks, you correlate the lessons with the Core Knowledge. When you write the response to the literature, you are meeting the Common Core standards. When you write a persuasive essay from the social studies, you are meeting the Common Core standards." Core Knowledge teacher

The teachers in the Core Knowledge school believe that their students do better on standardized tests as a result of the curriculum and its focus on content. As one teacher says, it amounts to "teaching to the test without teaching to the test."

"The kids that are exposed to so much content, especially nonfiction material—their comprehension is going to be much stronger. So ultimately, if they're good readers and they're good thinkers, they'll do better on the tests. You're teaching to the test without teaching to the test." Core Knowledge teacher

"It's different if you have children who are engaged. Even test prep: if you don't have students engaged, test prep goes out the window. Whatever you have, if you have students engaged, you can be more successful at whatever you do." Core Knowledge teacher

Many teachers not from a Core Knowledge school saw a connection between strong content and better skills. The two go hand in hand.

"Coming from a school where the kids have trouble thinking critically, it's because they don't have a lot of information. The kids that can think critically usually come from homes that have had a lot of experiences—their parents listen to a lot of different kinds of music, they go to all the different attractions in St. Louis. Those kids are better readers, better in math, so I think being a well-rounded learner includes lots of content, art, music, going to the courthouse and talking about the legislative process with your family. That makes a big difference. And if they don't get it from home, they have to get it from somewhere." St. Louis

Resistance and Attitudinal Obstacles to Core Knowledge

What Gets On That List? Who Decides?

By far, the key concerns of teachers when it comes to Core Knowledge revolve around the "who decides" and the "what goes in" questions. Teachers are anxious about who decides what to include on the must-have knowledge list. They worry that it will be amateurs or people with selfserving agendas—either political or financial—instead of educators like themselves. They also doubt the capacity of people—of organizations, of educators, of states, and of the nation—to agree on what will be on that list. These are not trivial concerns.

"It took me a long time to realize education's a business. The people that make the decisions truly probably are not educators. It's all a business to them. Even the textbook adoptions that we get is a money deal." Atlanta

"My point is not that there shouldn't be a common curriculum. I think it's very important that everybody's more or less on the same page because if you go from one state to the other, you shouldn't be lost. All I'm saying is, the crux of the whole thing is who is making it up? Who is deciding? I think the most important thing is that the people who are deciding are people who are knowledgeable about education. Who: that's the problem." New York City

The other question is about the content and whether it truly will—or can—fit the needs of all youngsters. Teachers know that kids come from different backgrounds, communities are different, and states are different. Will the curriculum accommodate those differences? Doubts emerge, and the conversation loops back to the start: Are there truly some things that all students need to learn?

"The farming community: those kids might need to know something else for them to get by in their future life. Would it apply here in the suburbs? There are some things that would probably fit in both categories, but I couldn't say that every kid's going to need to know the same thing." St. Louis

"So let's say there's an African-American child, or an Asian child in a class or the little Jewish child. It's already been decided what's going to be taught. What's included, and who decided what's going to go into it? I can understand what they're trying to accomplish, but I wonder if it's even possible, logically." New York City

The Term "Core Knowledge" Is Too Easily Confused with "Common Core"

As a term, "Core Knowledge" is virtually unknown among ordinary teachers, save for those already using this curriculum in Core Knowledge schools. In the focus groups, we had to introduce the term and define it before we could test reactions to it. Worse, it is routinely confused with Common Core. Even after Core Knowledge was introduced and defined by the moderators, the teachers routinely confused the two.

"Can you make them call it something different? Because that's all we're hearing is Common Core, so it's hard." Atlanta

Other key elements were unfamiliar to the teachers we interviewed. E. D. Hirsch, cultural literacy, and the reading series What Every X-Grader Should Know are unknown among regular teachers. (Again, the obvious exceptions were teachers at the Core Knowledge school in Queens.)

Reform Fatigue and Wariness of the "Research Shows" Argument

Core Knowledge faces a more global obstacle: the skepticism and resistance to reform by a teaching profession that has, in its eyes, seen far too many educational mood swings and transient reforms. The myriad of reforms that education has gone through—and is going through—may have had no substantive connection to Core Knowledge. But such reforms have left behind a legacy of knee-jerk doubts that are sure to greet any proposed change. Even when teachers take a liking to an idea, they start asking questions: Can this be practically pulled off? Will we be able to do this with all that we have on our plates?

"I've seen way too many of these things in twenty-five years. It's just like, really? Give me another acronym." Atlanta

"I think in an ideal world, that would be wonderful because the more you're exposed to, the more something can spark your interest. In reality, I think because of all the restrictions and the rules in teaching, this bloody testing, because of all that, I don't know if that could become a reality. If it could, I think it would be a wonderful thing." New York City

Teachers also have virtually no faith in the "research shows" argument. In fact, they tend to respond to it as a warning that the person making the recommendation is someone with no experience in the classroom and no knowledge of how children really learn.

"The term 'research-based' over time has become the teachers' nightmare. We view it as, okay, we've got a bunch of people who think they know what they're doing, but they've never been in a classroom. They're throwing out a bunch of jargon, and then they want us to buy into it." St. Louis

The "Dead White Males" Argument Against Core Knowledge Is a Nonstarter

We tested the argument that Core Knowledge represents the assertion of the dominance of one culture—Eurocentric, white, and male—at the expense of other cultures. Interestingly, across the four focus groups and with more than forty teachers interviewed, only one teacher even recognized the phrase "dominant culture created by dead white males" and understood its meaning. More to the point, most participants saw nothing wrong with exposing students to the touchstones of American and European history and literature.

Although it was not rejected outright, the equity argument—that students from low socioeconomic circumstances would especially benefit from Core Knowledge—did not resonate strongly. And in contrast to the winning arguments (e.g., a well-rounded education, building blocks of knowledge, antidote to narrowing), this idea did not surface spontaneously from teachers. But in Atlanta, when the moderator directly provoked the issue by asking what the relevance and purpose of knowing Shakespeare would be for an inner-city high school student, this was the response of an African-American teacher:

"Because he should have every chance that every other child does. Because you don't know where that child's going. And especially if they do go on to college—I mean, they need to know that." Atlanta

A teacher from the Core Knowledge school said:

"That child from Harlem needs to know what's going on outside of Harlem. If we are exposing everybody to a certain standard of knowledge, then we can have a truly standardized test. And that's what I think Core Knowledge does—it levels things out."

What We Learned from Core Knowledge Teachers

We conducted a focus group with teachers working in a nationally recognized Core Knowledge school in Queens. Naturally, they knew a lot about the principles and practice of Core Knowledge. The idea was to see how they talk about what they do, to learn what they find valuable in it, and to gain some perspective about what it takes to make the curriculum work. What was their advice, we wondered?

Pay Attention to How the School Culture Changes

The politics of how a school is transformed is important—in this case, the leadership in the school led the charge but also brought the teachers along in a cooperative fashion. The teachers helped one another at the outset and continue to do so more than a decade after the adoption of the Core

Knowledge curriculum. This has become a selling point for the school; instead of the isolation that teachers typically complain about, these teachers tout their school's culture of cooperation.

"The principal, the administration, have to want that change. How many of them are willing to take that plunge into this new thing? How are they going to get all their teachers on board? If they haven't really convinced the staff to work together, it's not going to work. In our institution, we actually have the best communication."

"I never felt like it was shoved down our throat. It was: 'Let's try this because we think that ultimately down the road, it's going to benefit the kids."

"When we started Core Knowledge, it was definitely top-down, it was the leadership of the building. But it fostered cooperation among all of the teachers because in the beginning, it was like, 'Oh, my goodness, we're overwhelmed.' There was a lot of sharing going on. I think that continues to this day. We have more community across the grade levels rather than everybody going into their room, shutting the door, and teaching whatever. People were more open, willing to share ideas and lessons."

The Intimidation Factor

Be prepared for the possibility that the initial introduction of the Core Knowledge curriculum can be intimidating for teachers. The sheer volume—of books, of topics, of information—seems scary at first exposure. Many don't have the confidence that they can pull it off.

"Initially, when I saw the book What Every First-Grader Needs to Know, I remember looking at this book, I said, 'Oh, my God, first grade?' Like this is a heavy, full curriculum."

"I remember first starting and [a teacher] said to me, 'Our school's a Core Knowledge school.' So she put on the table like thirty books and I called my mother and I'm like I think I made a mistake. And I'm just thinking, 'Can I even read all this?' It was helpful that the teachers around you were willing to help and say, 'Don't worry, we'll help you out.' Otherwise, I probably would have just went in the corner."

"You look at the curriculum, and you think, 'Oh, my word, this is a lot, how am I ever going to teach it?' You have stories to teach every month, you have poetry, you have core sayings, core virtues, social studies, composers, science—there's so many different components to Core Knowledge. And when you look at it thrown in front of you, you think, 'I can never do this.'"

The Thirst for Knowledge Can Be Contagious

According to these teachers, the focus on knowledge generates lasting enthusiasm among students; they become more curious, they care about learning, and they become lifelong learners. Even parents sometimes get swept along.

"We don't just reach the children; a lot of the parents become very involved, more educated on the topic. They come to parent-teacher conference and I'm talking to one father about simple machines, and he's telling me he has pulleys and levers in his garage. You give them a project, and it becomes a whole-family project. And they'll ask, 'We went through the reference book, but can you give us more information?' And they just take it to another level."

"When the parent gets that book in their hands, and this always happens: You feel they're no longer paying attention to you at the conference—because they always find something in there that carries them away. I could be saying something about their child, but they would be like 'Oh, yeah, nice, nice...' but I know they're gone."

"Kids get the books at the beginning of the year, and one kid in seventh grade came running up to me and said, 'You didn't hand out the seventh-grade books. I didn't get my book.' And I said, 'No, there's no seventh-grade book. It ends at sixth grade.' And he said, 'But I had the whole set. Why aren't we getting it, why don't they have a seventh-grade book?' It is important to the kids. Even their core expos—they have a fond memory of what they did in Kindergarten and first grade."

Teachers in the Core Knowledge School Have More Autonomy

Core Knowledge teachers report that they have more autonomy and freedom to teach. Other schools—that is, non-Core Knowledge schools—are increasingly regulating how much time that teachers can spend on each topic, and they work off a checklist to ensure compliance.

"There's flexibility here. It's not that you're walking in the door I have to be doing this at that moment. And a lot of city schools are so regimented. You have to spend fifteen minutes on here, twenty minutes here, that everyone has to be on the same page."

"When I was substituting in other schools, they had the guided reading, the independent reading, and it's like fifteen-minute blocks and it's very rigid. Someone comes by and makes sure that you're doing it at this time. There's no room for expanding or getting carried away with a topic. It's just very rigid."

Core Knowledge and Implementation

Several Core Knowledge teachers warned that partial implementation of Core Knowledge is an invitation to failure. Perhaps because they have experienced so much success, they believe that a school has to buy into the whole program—and they think that half-measures will lead to missed opportunities.

"It didn't work out for a lot of schools because they felt they could pick and choose." Like the Chinese menu rather than taking all of it on at once. And again that goes to leadership. Because there was a push a couple of years ago with Core Knowledge in city schools. And we had so many people coming and visiting and they'd say, 'Oh, we're doing just sayings and phrases.' Well, that's not Core Knowledge. You know, it's not a 'pick and choose.' It's getting all of it."

Resources mattered, according to these teachers—and having the course material on hand is crucial. There is an intense focus on reading, books, and materials, so it was absolutely helpful to have the resources.

"It's fine to talk and do a lesson or SMARTBoard, but you need to also have something that a second-grader can understand and a fourth-grader can understand. There are some schools that don't have the books. We have class sets. So the children can look at it and they can sift through it and having the book there to see it is a big difference."

Some Marketing Help

These teachers loved their school and the Core Knowledge curriculum, so at the end of our discussion, we asked them for marketing help. "What would you say to someone—a parent, a teacher—to persuade them to come to your school?"

These are some of the phrases they came up with when we asked them to finish this sentence: "Come to our Core Knowledge school because...

- our children are engaged. Our children are motivated.
- your child will be a more well-rounded person.
- we create a community of learners.
- our children are having fun.

We asked the teachers to talk freely and make the best case they could for Core Knowledge. Here is one of the more eloquent quotes:

"Why not Core Knowledge content? They're going to read anyway, why not a suggestion as to some of the literature—some of the classics, some of the books that they have a choice of reading? Is it going to hurt them? No. I think it's going to help them. It's going to help them to be a well-rounded person. Poetry: they're exposed to different poets, they're exposed to many, many different works and musicians and scientists. Why not expose them? Why limit them? And when they go out there and they open their mouth to speak, people say, wow, this kid knows a lot about whatever topic that he may have learned during the years in a Core Knowledge school. And I think, 'Why limit them?'"

Concluding Thoughts

Appealing to Teachers' Best Instincts

Continuing with the marketing research mission, we sought to distill the most promising descriptions of Core Knowledge into a brief pitch that allows it to put its best foot forward. Based on the focus group findings with teachers, we'd suggest a presentation that goes something like this:

Today's curriculum limits children. Core Knowledge *expands* the curriculum so that children become well-rounded. It engages their imagination and teaches students the knowledge they need to succeed on standardized tests—without teaching to the test. Teachers have used Core Knowledge for over twenty years and have had great results with all kinds of kids from all kinds of backgrounds. The curriculum gets out of teachers' way and gives them the freedom to teach in their own style. Each year builds on the knowledge that students learned the year before. And when people from all walks of life meet our boys and girls, they'll say to themselves, "There go educated, well-rounded young adults who carry themselves with poise and respect."

You know how some students' eyes glaze over in class? Get ready to see real excitement and real learning. You know how education reforms come and go? Prepare to be swept away for the rest of your career.

Attractive in Principle but Still Facing Challenges

As education reforms go, Core Knowledge is built upon principles that innately appeal to teachers. At a time when many teachers rail against a narrowing of the curriculum, it offers breadth. As teachers instinctively feel that there are things that students must know to participate in the life of this nation, Core Knowledge agrees—and names those things. It complements the Common Core State Standards in that it offers a curriculum to help achieve the goals and skills

established by the initiative. Auspiciously, it doesn't dictate pedagogy or structure to teachers; how to teach is left to them. Judging by the present-day Core Knowledge teachers with whom we talked, it holds the promise of tapping student curiosity and the spirit of teachers themselves.

But Core Knowledge faces key challenges. Some of the challenges are marketing basics. It has virtually no name recognition; teachers have never heard of it. What's more, the term itself is too easily confused with Common Core—and Common Core is ubiquitous. Some of the challenges are substantive. Teachers are skeptical about who decides what knowledge will be on the mustteach list; they worry about the capacity of communities across the nation to agree on the list. Core Knowledge can also face implementation challenges. At the school level, beyond resources, its success appears to require smart leaders who foster a cooperative spirit among staff in the face of what could be an intimidating amount of work. Finally, Core Knowledge faces challenges in the macro-environment. It is competing for attention and allegiance when reform fatigue is widespread among America's teaching corps and when yet another acronym or perceived "gimmick" will be greeted with suspicion, if not dismissal.

A Final Note of Hope

Nevertheless, it's fitting to end on a note of optimism and appreciation for what is possible, considering that Core Knowledge is not an untested venture. This quote from a Core Knowledge teacher in Queens, a woman who was educated in Trinidad and immigrated to the U.S., can serve as the coda:

"What Hirsch did—and hopefully it can continue—it's phenomenal. Because I've never seen anyone come down to the level of the children, and really had a perspective on what a child in different grades needs. I've never spoken to him, but I think he must have had a vision of where he would want our children to grow. And I think it's marvelous and I wish every parent could see the function and the purpose. As a parent and as a teacher, I think it's phenomenal that a man like him would take the time to create such a marvelous curriculum that our kids, especially from this type of neighborhood, can fully weave into the fabric of our society. They would fit in, and they would feel at ease. And they would just shine."

Why I'm for the Common Core

by E. D. Hirsch, Jr.

When I'm asked if I support the new Common Core State Standards (CCSS), I give an emphatic "yes." They constitute the first multi-state plan to give substance and coherence to what is taught in the public schools. They encourage the systematic development of knowledge in K–5. They break the craven silence about the critical importance of specific content in the early grades. They offer an example (the human body) of how knowledge ought to be built systematically across grades. They state,

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.

That principle of building coherent, cumulative content animates the most effective school systems in the world, and for good reason: The systematic development of student knowledge from the earliest grades in history, literature, science, and the arts is essential to high verbal ability—which in turn is the key to social mobility and college readiness.

The words quoted above don't define the specific historical, scientific, and other knowledge that is required for mature literacy. (If they did, no state would have adopted the CCSS, because specific content remains a local—or teacher—prerogative in the U.S.) But those words are an impetus to a brave and insightful governor or state superintendent to get down to brass tacks. In early schooling, progress cannot be made without coherence and specificity. Little can come from today's incorrect but widespread assumption that critical-thinking or reading-comprehension skills can be gained without a specific, systematic buildup of knowledge.

Nobody can know whether the Common Core standards will end in triumph or tragedy. The certitudes and fierce warrior emotions that beset this topic, however, are misplaced. It's said that truth is the first casualty in a war. Subtlety has been the first casualty in this one. Whether the CCSS improve American education will depend on what the states actually do about developing rich content knowledge "within and across grades" as required. Doing so will take, at minimum, the courage to withstand the gripe-patrols that will complain about the inclusion of, say, Egypt in the second grade. But who can be sure such courage won't be forthcoming from a forceful governor or superintendent once the absolute need for specific, cumulative content is understood? Niels Bohr said, "Prediction is very difficult, especially about the future." It will take just one state to have the guts to form a specific curriculum. Big, unmistakable gains will result, and those results will influence others and the die will be cast. That will be the triumph. The tragedy will be the status quo, which is all the opponents of the CCSS currently have to offer.

The Bohr principle ought to be the watchword in this debate. Those who confidently predict failure haven't any more knowledge about what will really happen than I do.

But this can be said with confidence: Unless the alternative educational plans of the critics (where are they?) also require coherent content knowledge within and across grades, their schemes are not likely to be as effective as the CCSS. If critics do support those key principles of specificity and coherence—well, then, why not just support this daring effort that has been miraculously adopted by multiple states and correct whatever defects you see in the course of its actual implementation?

Common Core Can Reduce Teacher Bashing

For many years, my son Ted has been principal of the elementary grades of a K-12 public charter school in Massachusetts. It uses the Core Knowledge Sequence (a grade-by-grade outline of essential content) as a primary tool for developing its curriculum. His school ranks in the topperforming group of schools in the nation's top-performing state. Needless to say, the school has long followed the rightly admired Massachusetts standards. Indeed, the Massachusetts standards are so good that some of the most vocal opponents of CCSS are claiming that the Common Core State Standards will represent a watering down. But Ted's school justifies a very different inference. His Core Knowledge-based curriculum is consistent with both the Massachusetts standards and the CCSS. How so? It's because both sets of standards set rigorous goals but don't specify content for each grade level. In the course of actual implementation, therefore, a school can simultaneously fulfill both the Massachusetts standards and the CCSS, as Ted's school so effectively does.

This fall, Ted's daughter, Cleo, will be teaching in a school in the Bronx, assigned to teach the American Revolution to seventh-grade public school students. Though hugely competent, she panicked and called me: "O my gosh. Granddad, are there any teaching guides for this?" Her school could offer no real support. I sent her one of the thick, grade-by-grade teacher handbooks produced by the Core Knowledge Foundation. These handbooks explain each topic and provide instructional suggestions. In addition, they also lay out the knowledge above and beyond the lesson topics that would be useful for the teacher to have by way of background. The best sources for further relevant materials wrap up each section. Cleo was greatly relieved.

But what about all the other Cleos out there who are being thrown into these sink-or-swim situations in our public schools, sent into classrooms in which it's impossible to know what their students already know and in which teachers are given scant guidance about what they should

be teaching or—worse—are asked to teach literacy classes based on the trivial and fragmented fictions found in the standard literacy textbooks?

Teachers in the typical American classroom cannot rely on their students having previously acquired any specific item of knowledge. But effective classroom teaching depends on key prior knowledge being shared by all the members of the class. Without such shared knowledge, truly effective whole-class teaching cannot occur—no matter how potentially effective the teacher is. In today's schools, teachers are compelled to overuse all sorts of individualizing strategies—at huge opportunity cost to the progress of the class as a whole. Individualized instruction is always important. But it is far more effective when students share prior academic knowledge, which alone enables the teacher to engage in varied instructional approaches.

That's why I have become so impatient with the teacher bashing that has overtaken the educationreform movement. The favored structural reforms haven't worked very well. The new emphasis on "teacher quality" implies that the reforms haven't worked because the teachers (rather than the reform principles themselves) are ineffective. A more reasonable interpretation is that reforms haven't worked because, on average, they have done little to develop "rich content knowledge within and across grades."

The single most effective way to enhance teacher effectiveness is to create a more coherent multiyear curriculum, so that teachers at each level will know what students have already been taught. The Common Core State Standards offer a framework for any state to create the curricular coherence that could lead to massive gains in student learning. If we created a more coherent school environment in which a teacher's work in one year reliably builds on what has been taught in prior years, teacher effectiveness would improve on a large scale. A conscientious and intelligent realization of the new Common Core Standards would introduce a key element that has been missing in our schools for too many tragic decades.

The Misuse of Common Core Tests

So far, I am leery of both sets of official tests for the Common Core, at least in English language arts (ELA). They could endanger the promise of the Common Core. In recent years, the promise of NCLB was vitiated when test prep for reading-comprehension tests usurped the teaching of science, literature, history, civics, and the arts—the very subjects needed for good reading comprehension.

Previously, I wrote that if students learned science, literature, history, civics, and the arts, they would do very well on the new Common Core reading tests—whatever those tests turned out to be. To my distress, many teachers commented that no, they were still going to do test prep, as any sensible teacher should, because their job and income depended on their students' scores on the reading tests.

The first thing I'd want to do if I were younger would be to launch an effective court challenge to value-added teacher evaluations on the basis of test scores in reading comprehension. In the domain of reading comprehension, the value-added approach to teacher evaluation is unsound both technically and in its curriculum-narrowing effects. The connection between job ratings and tests in ELA has been a disaster for education.

The scholarly proponents of the value-added approach have sent me a set of technical studies. My analysis of them showed what anyone immersed in reading research would have predicted: The value-added data were modestly stable for math but fuzzy and unreliable for reading. It cannot be otherwise, because of the underlying realities. Math tests are based on the school curriculum. What a teacher does in the math classroom affects student test scores. But readingcomprehension tests are not based on the school curriculum. (How could they be if there's no set curriculum?) Rather, they are based on the general knowledge that students have gained over their life span from all sources—most of them outside the school. That's why reading tests in the early grades are so reliably and unfairly correlated with parental education and income.

Since the results on reading-comprehension tests are not chiefly based on what a teacher has done in a single school year, why would any sensible person try to judge teacher effectiveness by changes in reading comprehension scores in a single year? The whole project is unfair to teachers, ill conceived, and educationally disastrous. The teacher-rating scheme has usurped huge amounts of teaching time in anxious test prep. Paradoxically, the evidence shows that test prep ceases to be effective after a few lessons. So all that time is wasted, time during which teachers could be calmly pursuing real education, teaching students fascinating subjects in literature, history, civics, science, and the arts, the general knowledge that is the true foundation of improved reading comprehension.

The villains in this story are not the well-meaning economists who developed the value-added idea but, rather, the inadequate theories of reading comprehension that have dominated the schools, principally the unfounded theory that when students reach a certain level of "reading skill," they can read anything at that level. We know now that reading skill—especially in the early grades—varies wildly depending on the subject matter of the text or the test passages.

The Common Core tests of reading comprehension will naturally contain text passages and questions about them. To the extent that such tests claim to test "critical thinking" and "general" reading-comprehension skill, we should hold onto our wallets. They will be only rough indexes of reading ability—probably no better than the perfectly adequate and well-validated reading tests they mean to replace. To continue using them as hickory sticks will distract teachers from their real job of enhancing students' general knowledge and will encourage teachers to continue doing the wasteful sorts of unsuccessful skill exercises that our classrooms have already been engaged in.

The solution to the test-prep conundrum is this: First, institute in every participating state the specific and coherent curriculum that the Common Core standards explicitly call for. (It's passing odd to introduce "Common Core" tests before there's an actual core to be tested.) Then base the reading-test passages on those knowledge domains. Not only would that be fairer to teachers and students, it would encourage interesting, substantive teaching and would, over time, induce a big uptick in students' knowledge—and hence in their reading-comprehension skills. That kind of test would be well worth prepping for.

Parts of this essay originally appeared in The Huffington Post (<u>here</u> and <u>here</u>). This compilation also appeared as a three-part series on Fordham's Common Core Watch blog.