

Manhattan Institute Talk about *The Knowledge Deficit* and New York City reading scores

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I thought it would give you a sense of the practical implications of my new book if I focused on New York City reading scores.

The reading scores of 8th graders in New York City and in all the central cities of the US are low and have not risen in recent years. My book explains why. Reading scores at the 8th-grade level are not *primarily* a function of sounding out letters fluently and accurately. Given adequate early instruction in phonics, reading ability by 8th grade is determined mainly by a person's store of background knowledge. Reading comprehension depends on background knowledge for a fundamental reason. What is *unsaid* in writing or speaking, and which must be silently known, is just as critical to meaning as what is overtly said. These two facts, then, frame the issue: low 8th-grade reading scores and high dependency of reading comprehension on knowledge.

By contrast with 8th-grade scores, the reading scores of 4th graders have risen in New York, as they have all over the nation, thanks to improvements in basic skill instruction. Joseph Torgesen has shown that 4th-grade reading tests place a heavy emphasis on accuracy and fluency in sounding out words. But reading scores in grade 8, where the emphasis falls mainly on comprehension, are far, far more important than reading scores in grade 4. 8th graders are about to enter high school or the workforce. In five years, they will be voters. If 8th graders can't read with understanding, then they can't learn high-school subjects well; they can't communicate well; they can't participate effectively in the economic or in the civic sphere. We know from the *Longitudinal Survey of Youth* that adult reading scores correlate highly with a person's chances in life. According to the LSY data, keeping all other variables constant, you will stay out of jail and you will make more money if you make higher scores on a reading test. If this was true when the LSY studies were made some years ago, it's all the more true now that the world is flat. 8th-grade reading scores in New York and our other central cities are a national misfortune and, in the global economy, they predict national decline unless we do something quite decisive about these scores.

We should not be lulled into thinking that New York's current improvements in 4-grade reading tests predict future reading gains in grade 8. As some of you know, New York made 4th-grade gains four years ago. Yet its current 8th-grade scores have not gone up correspondingly. In fact, eighth-grade reading scores in New York have gone down. A check with the National Center for Education Statistics shows that in 2003 only 22 percent of New York 8th graders could read proficiently, and in 2005, even fewer of them — 19 percent — could read proficiently. Why didn't the reading gains in grade 4 develop into gains later on when the scores really count? This is one of the conundrums I'll try to unravel in this talk. At the same time, I will try to explain why the strong emphasis on reading in New York City these days — 120 minutes a day — has not succeeded in raising these 8th-grade scores.

Chapter 5 of my book is called: "Using School Time Productively." I offer evidence that, by international standards, our students fall farther behind the longer they stay in our schools — a clear indication of low academic productivity. The 120 minutes devoted to literacy in New York City are not being used productively. Academic productivity is the nub of the matter. If we were to greatly improve our schools' productivity in the use of classroom time we would solve the central problem of educational improvement in the United States today. So long as students continue to learn little in the course of a year it scarcely matters what new systems of governance or structural reforms we put in place. But if classroom time is used productively, student

achievement is going to rise no matter who runs the schools, or whether they are labeled “charter” or something else.

I argue in my book (with reading as my central example) that the chief reason classroom time is not being used effectively is that our schools are dominated by a set of well-intentioned but flawed ideas. In the case of reading, the chief intellectual flaw is the notion that reading is a kind of formal skill like typing. If you practice typing for 120 minutes a day, of course you are going to get good at it, and once you get good at typing you can type anything. But once you get good at sounding out words fluently and accurately, it’s *not* the case that you can *read* anything. You may be able to sound the text out, but that doesn’t necessarily mean you are going to understand it. The point is perhaps obvious, but its implications negate a whole system of formalistic ideas that dominate in our schools of education and our schools — the notion that how-to knowledge rather than mere information is the chief thing to be gained in school. If you look at the materials being used to train prospective teachers you will find it asserted that any reasonable content will do as the vehicle of these how-to skills. The aim of schooling, it is said, is “learning to learn”. And the chief of these how-to skills is said to be reading.

Unfortunately, in the case of reading, the opposite of this formalism is true. The how-to component of reading is readily achieved, and our schools are doing a better, though not ideal, job of teaching early phonics. Because of the improvement in teaching decoding skills, New York students are making better 4th-grade scores. But achieving real reading ability is a great deal harder than mastering the how-to component. In fact, general reading ability will continue to be *impossible* to achieve so long as our schools insist that learning to learn is more important than learning things. Reading comprehension is dependent on knowing many, many things. That is a main thesis of my book.

It’s a safe bet that everybody in this room is a good reader. Clearly there is such a thing as general reading skill. The standardized tests are very accurate in gauging it. You would all do extremely well on one of the standard reading tests. But we should not be misled into thinking that such general reading skill is a single ability. It is a hard-earned composite skill that consists of thousands of sub-skills, such as the skill of reading about the Civil War, the skill of reading about economic policy, or about college life, or about computer software. Reading proficiency in any one of these domains does *not* guarantee proficiency in another domain. As cognitive scientists say, reading comprehension is “domain specific.” But if reading is domain specific, how can there be such a thing as general reading ability? Answer: General reading ability requires general knowledge, that is, knowledge of a great many *different* specific domains. It follows that if we want our 8th graders to be good readers we will need to provide them with broad general knowledge. There is no other route to general proficiency in reading. That bears repeating: There is no other route to general proficiency in reading.

We know from the work of Betty Hart and Todd Risley that children from advantaged circumstances come to school with a store of knowledge that is far greater than that possessed by disadvantaged children who attend our central-city schools. Outside of school, these more fortunate students are surrounded by adults and peers who provide them with literate knowledge. For them, as the great James Coleman showed long ago, academic productivity *inside* the school is not as critical as it is for their less fortunate peers. But if the less advantaged students of New York City are to gain the general knowledge that they need for proficient reading, they will need to gain it mainly during the school day. For them, the productive use of school time is absolutely critical.

In my book and more generally in the work of the Core Knowledge Foundation, we have tried to encourage two changes in school practices to yield greater academic productivity, and when these changes have been put into effect, they have led over time to truly large effects on reading comprehension. The first and most momentous change is persuading the staff of a school to the principle that each grade should impart a core of *specific* knowledge upon which the next grade can build. For example, if the first grade deals with the Pilgrims, the second grade won’t repeat this topic, but will go on to the Pioneers or some other topic. In that way, each grade can build cumulatively on the previous one, without engaging in time-wasting repetitions or leaving huge gaps. You cannot have academic productivity unless you specify enough common content at each grade level to avoid repetitions and gaps in subsequent grades.

This point about non-repetition is almost too obvious to need saying to this distinguished group. How was such an obvious point missed? It is missed because of the how-to theory — the theory that what counts is not learning stuff but gaining “critical thinking skills” or what reading experts have labeled “inferencing skills.” I

expend a good deal of space in my new book in showing that these formal skills, on which so much time and effort is being expended during the 120 literacy minutes each day, are scientifically bogus. Two decades of instruction in these formal skills have resulted in a net decline in our students' real-world reading abilities.

One practical implication is this: To achieve a productive use of school time, the schools of New York will need to specify with some definiteness the core elements of broad knowledge that a first grader needs to have before entering grade 2 — say 50 percent of the whole first-grade curriculum. Consider how that simple reform will improve the productivity of grade 2 and each subsequent grade. The teacher will *not* be faced with explaining the Pilgrims to some students while others, squirming, miss out on the chance of learning about Daniel Boone. The task of the American classroom teacher is currently made hugely difficult by the content incoherence introduced by the how-to theory of learning. With each higher grade, the American public-school teacher faces greater and greater diversity of academic preparation among students. So it is no surprise that more fifth-grade teachers burn out and leave the profession than do first-grade teachers. The job conditions become increasingly discouraging. Classes are increasingly fragmented. The less advantaged students fall increasingly behind.

Once a school has agreed on the need of sequencing some specific knowledge grade by grade, there is a further requirement for achieving a productive use of school time, which is this: the specific knowledge chosen should be selected for its efficacy in promoting reading comprehension. Not just any knowledge will do. The Pilgrims are a more important topic than the Pietists, not because they are nobler, but because the Pilgrims are frequently alluded to without explanation in American discourse. I happen to know about the Pietists because of my narrow academic specialties, but I can't expect you to know about them. Pietists will *not* be alluded to without explanation in the New York Times. The Pilgrims will be. It follows that certain items of specific knowledge are more important to general reading comprehension than other items. So if we want to achieve productive use of school time, we will be very selective in the core knowledge that we mandate for each grade. Selectivity is almost as important as specificity.

When a school follows both of these principles in its curriculum — grade-by-grade specificity and selectivity — its students will make big long term gains in reading comprehension, because they will be systematically gaining the general knowledge that is requisite to general reading ability. This is a multi-year project that needs to be started as early as possible through generous use of reading aloud in the very earliest grades. Longitudinal studies of schools that have implemented the Core Knowledge curriculum show large gains in reading comprehension — gains so large that you do not even need elaborate statistical techniques to prove the case. The Core Knowledge students who start out below the comparison group, by grade six have gone far beyond the comparison group in reading comprehension.

In the central city, this reform needs to go beyond the individual school because the individual school is not the operative unit in the central city. Students are moving in and out of individual schools at a very high rate, and the most disadvantaged students move the most — usually within the district. Hence there needs to be a district-wide set of specific content standards — occupying up at least 50 percent of the whole curriculum. Any educational reform that ignores student mobility is simply writing off a huge number of our neediest students.

In all my years of dealing with this contentious core-curriculum issue, I have not heard a single valid *technical* argument against it. The arguments are either scientifically incorrect or they are ideological. They are based either on an incorrect how-to conception of education, or on an ideological repugnance toward the idea that some central agency should decide the core content of the curriculum. Everyone is entitled to his ideology. But since there is *no* good scientific or technical argument against a specific core curriculum, and since real advances in reading comprehension *absolutely* depend on it (There is no other way.), we shall have to choose between our dislike of centralized content decisions, and our desire to achieve real advances in reading. Or to put the stark choice in another way: we shall have to choose between sentiment on the one side and social justice on the other. Thank you.