The Common Core State Standards & Student Diversity

Making them work for everyone

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Will the CCSS make a real difference?

Depends on educators recognizing what needs to be changed to make them work...

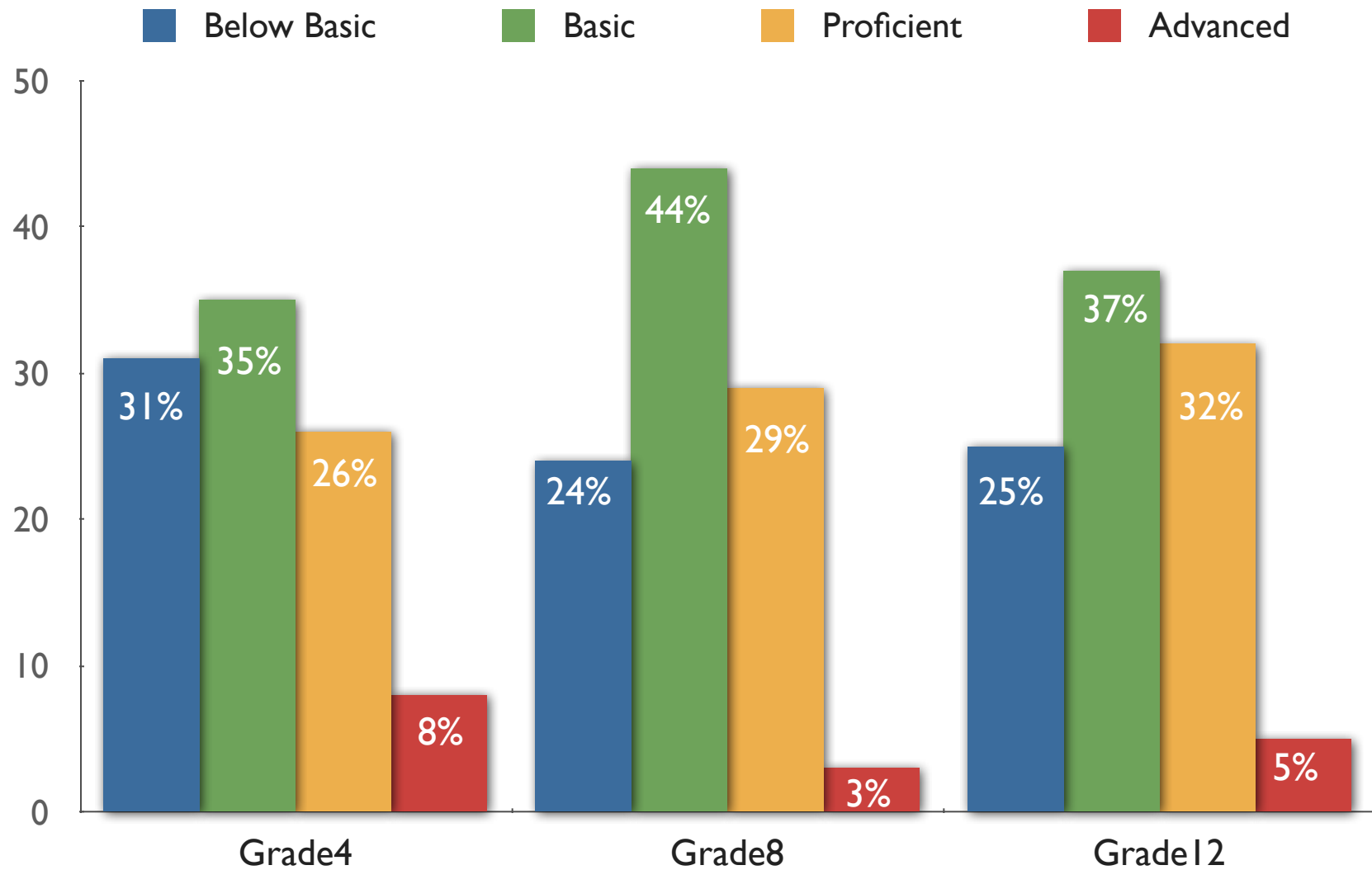# The CCSS—a realignment of educational goals and societal expectations

+ The CCSS raises the bar substantially on what is to be taught in our schools, and on the skills & knowledge students are expected to learn during their K-12 education.

+ This is a crucial correction for a school system that's losing the confidence of the society it serves—it's a reform we can't afford to botch.

+ The implementation of the CCSS requires careful and thoughtful planning, or the CCSS will end up like so many reforms before it—well-intentioned, but unworkable.

+ It calls for major shifts in our thinking about teaching and learning, and about the professional development teachers need for the kind of teaching implied by the new standards.

A crucial question to ask before heading out: how did we get here?

- The CCSS require us to analyze and to understand how our schools have fallen on such hard times.

- How did we end up with a 4 year gap between where students should be at the end of the 12th grade, and where they need to be on entering college?

- There are gaps galore—between majority and minority group students, between our students and students elsewhere in the world, between what our schools used to be, and what they are now.

How all English speaking students performed in 2009 NAEP Reading Grades 4, 8, 12 by reading achievement level (NCES)

Legend: Below Basic, Basic, Proficient, Advanced

Grade4: Below Basic 31%, Basic 35%, Proficient 26%, Advanced 8%

Grade8: Below Basic 24%, Basic 44%, Proficient 29%, Advanced 3%

Grade12: Below Basic 25%, Basic 37%, Proficient 32%, Advanced 5%

How did our schools lose their mojo these past several decades?

- Student diversity is often blamed: schools in Finland or Singapore do not have to deal with the student diversity that is so prevalent in U. S. schools, the argument goes.

- There are educators who wonder whether the CCSS are realistic, given the considerable student diversity in our schools, and the disparity between ethnic/"racial" groups in academic performance.

Expectations and outcomes

- Disparities between student groups in academic achievement and educational outcome constitute the most pressing problems confronting our schools today.

- We know the importance of expectations in schooling: there is a relationship between high expectations and school outcome, as long as the school provides the instructional support students need to meet those expectations.

- But what about ELs and other language and cultural minority students? We expect them, along with all students to work toward full proficiency in ELA and Math, but how are they to meet high expectations when no one seems to believe they are capable of learning what kids their age should be learning?

But is diversity the problem?

- The problem has never been that the kids, whatever their background, couldn't handle the rigors of the school's curriculum—they could, and would have—the problem has been that educators have doubted that all of their students are prepared or motivated to do the work the curriculum required.

- The school's curriculum is not what it should be, but poor minority group kids, and ELs especially are getting an even less rigorous curriculum, with materials that are considerably lower in level and value than their mainstream classmate are getting in school. Why?

- Sad to say, it's because they are poor, culturally and linguistically different, or look different from the ones educators know how to teach.

I'll return to the question of diversity at the end

I begin with a premise:
All children come to school expecting to learn, hoping to succeed. As educators, it's up to us to provide the instructional support they need to fulfill their expectations and goals,
& to never give up on them.

Our schools are at a turning point

✦ How we handle the challenge represented by the CCSS will either strengthen our schools, or strengthen the resolve of the many forces in our society just waiting to bring them down.

✦ Done thoughtfully and well, they could restore faith in the public education system that has been the foundation of our nation's prosperity and growth.

✦ Done poorly—say, if the CCSS are treated as yet another reform that will go away like all the others that have been visited on our schools, or if schools decide to leave students who have not done well in our schools out of consideration for change because "they are having enough trouble as it is"—the result will be another nail in the coffin that the advocates of privatization are hoping to bury the American public schools in.

What do the CCSS call for?

- The Standards require the use of more challenging texts at every grade level, and greater rigor and depth required in student understanding of such materials.

- They emphasize reading and writing as crucial means for the learning of critical content across the curriculum.

- They call for students to show they understand what they are learning by constructing effective arguments, explanations, & presentation of information in writing.
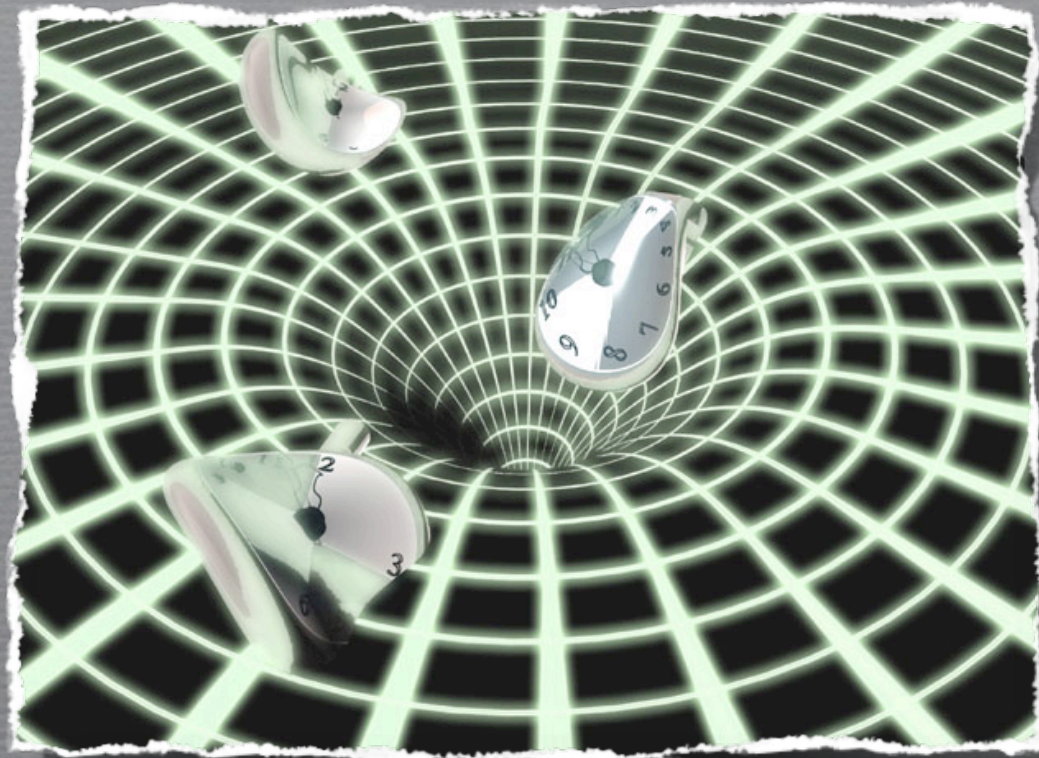
That's what's expected of all students, irrespective of background. Question:
How do we make that happen?

That's what this session addresses

- We will first take a close look at the curricular changes that are implied by the CCSS;

- We will discuss our efforts over the past 5 years to raise language and literacy outcomes at some NYC schools, and show you some instructional strategies that have proven to be quite effective for doing that;

- That was before the CCSS came along, but our goals & approaches map so well onto the CCSS, you would think we had an advance peek!

- And we will share with you our thinking on what it takes, in terms of planning, administrative support, and professional development to implement such a program elsewhere.

So what will the CCSS mean?

- Students are expected to work with more complex texts from K-12, and to develop the more robust literacy and thinking skills required learning across the curriculum—but what will that mean instructionally?

- What will teachers need to know and do to support student learning through more complex texts, especially in the case of ELs & LM students?

What makes a text complex?

+ First question to ask is this: for whom?

+ Something I might regard is complex and therefore demanding, might be easy for you.

+ Better way to frame this question: what are some of the factors that can make a text difficult for someone to read and comprehend?

+ One possible source of difficulty might be the use of words the reader does not know, or which refer to complex ideational structures that are themselves difficult to understand.

+ An example: "Chinese languages are tonal and analytic."

+ Chinese languages? Tonal? Analytic?

These are *language dependent skills*— thus, language development is essential

✦ The language called for, however, is not your ordinary, everyday variety, but specialized registers characterized by grammatical structures, forms, and rhetorical devices that are quite different from those used in non-academic oral communication.

✦ No one is a native speaker of academic language, although kids who have been read to a lot in their early years are already familiar with it, and will have an easier time learning to read & acquiring such language than kids who have not had such experiences.

✦ Academic language is developed through literacy, and no one can make real progress in school without acquiring the various registers required for reading and writing across the curriculum.
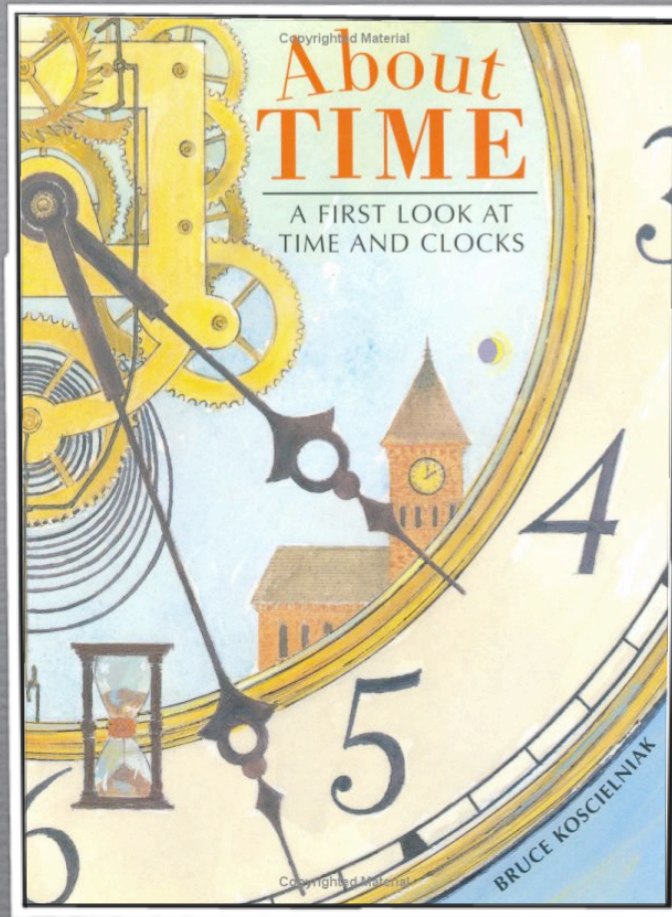
An example—an informational text listed as exemplar for Grades 4-5. *About Time: A first look at time and clocks* by B. Koscielniak

¶1 Sometime around 1440, the spring-powered clock was invented. Instead of depending on the pull of weights for power, this type of clock used a flat metal spring wound tightly into a coil. The escapement allowed the spring to unwind by turning one gear tooth at a time. With the use of a spring, smaller, truly portable clocks could be made.

¶2 The first well-known watches, made in Germany around 1510 by Peter Henlein, were so named because guards or "watchmen" carried small clocks to keep track of how long to stay at a particular duty post.

¶3 Many different skills went into making a clock, and new tools and methods were constantly being invented to make ever smaller, more complicated mechanisms that worked with greater precision.

¶4 Founders melted and poured metal into a mold to make clock parts.

¶5 Spring makers hand-forged (heated and pounded into shape) and polished steel clock springs.

¶6 Screw makers cut screws used to fasten clocks together by using a small lathe devised by a German clockmaker in 1480. Earlier, only wedges or pegs were used.

¶7 Gear-tooth cutting had been done by hand until the mid-1500s, when Giannelo Torriano of Cremona, Italy, invented a machine that could cut perfect gear teeth.

¶8 Brass replaced iron for clock making. Engravers, gilders, and enamellers decorated clock cases and dials. Glass -making shops made and cut glass. Woodworkers made clock cases."

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Informational density:

➻ Notice that each phrase, clause, sentence and paragraph within this text is crammed with information.

➻ The text's purpose is to inform the reader about the topic—time and the history of clocks —a huge topic, so writer must be selective & find ways to pack a lot of information into text.

➻ Aside from the key information about the topic, there is also need for background that adds historical facts that give depth to the story.

➻ Many devices allowing info to be stuffed into structures can be seen in this paragraph.

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Informational density (con't)

a lot of information in this paragraph:
�':' A kind of clock invented;
➥ around 1440;
➥ spring-powered clock;
➥ before 1440, clocks powered by weight
➥ power created by pulling;
➥ spring-powered used coil;
➥ coil made of flat metal;
➥ metal wound tightly into coil
➥ "Escapement" allowed spring to unwind;
➥ escapement turned gear;
➥ gear had teeth;
➥ one tooth turn at a time;
➥ this let the spring unwind.
➥ Spring enabled small clocks to be made; small is good;
➥ small clocks can be carried easily.

"The escapement allowed the spring to unwind by turning one gear tooth at a time."

- ✦ What's an escapement?

- ✦ Not a word we know, right? Does the description of how it works tell us anything about its function or purpose? Did we miss something?

- ✦ A clue in this sentence tells us to look for an explanation in the pages preceding the one with this paragraph.
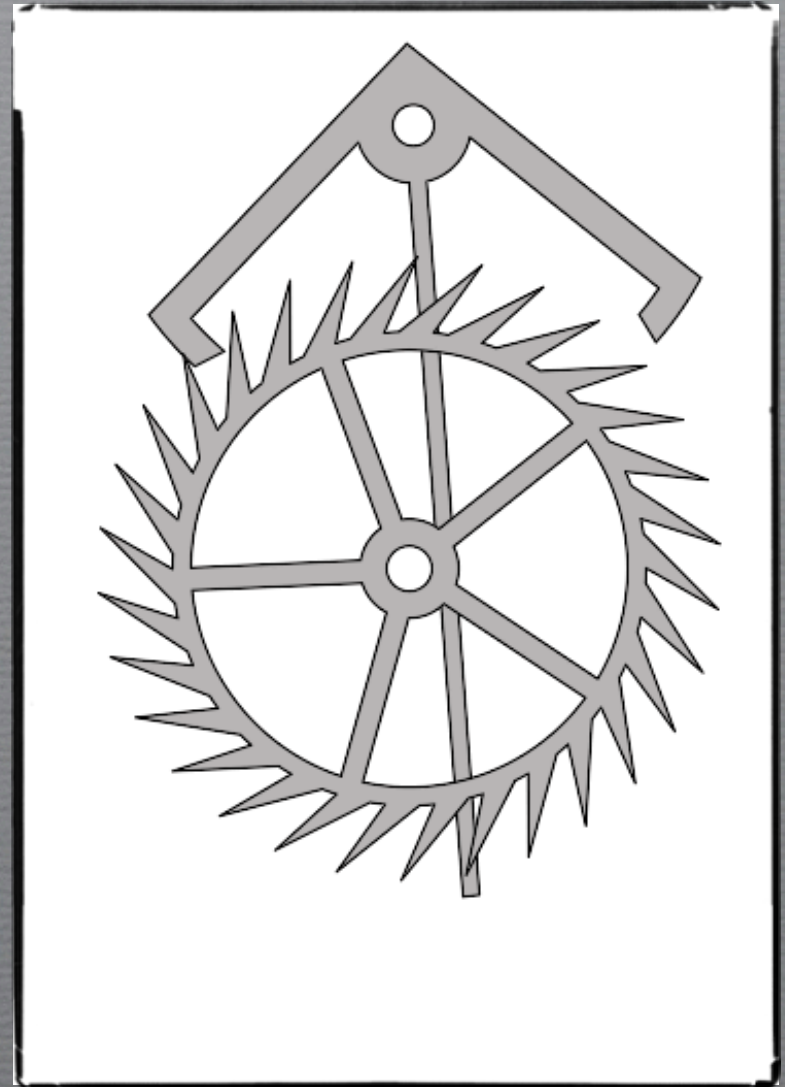
And sure enough…

- We find the following explanation a couple of pages back:

  It is the invention of the "escapement" that made mechanical clocks possible. The escapement is so called because it allows the pull of the weights to "escape" through a check and release system—by one gear tooth at a time...

- What was the clue?

- The use of the definite article. It tells the reader that it was previously mentioned. Had the indefinite article been used, we would have thought it was a word we *should* have known.

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Grammatical complexity is related to informational density.

➥ Question—how to include and present the information necessary for interpretation into a text?

➥ Writers select structural devices that allow information to be presented in orderly and coherent way—foregrounding parts that need to be highlighted or made salient, backgrounding parts that needed to be included but are less important, connecting related ideas, including contextual details that help situate the information, and providing explanations to support the claims or assertions made.

➥ The purpose of such choices is to preserve information flow–allowing readers to track references, to follow what is being communicated, etc.

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Devices for packing information into sentences:

➤ Noun modification—can be before the noun or after the noun. This writer appears to prefer pre-nominal modification: e.g., *a flat metal spring, the first well-known watches, small clocks,* etc. Notice that each of these could be post-nominal constructions as well: *a metal spring that is flat, the first watches that became well-known*, etc.

➤ Noun compounds—*spring-powered clocks, gear tooth, watchmen, duty post.*

➤ Appositives—phrases & clauses inserted after NP to add more information about it: e.g. *made in Germany around 1510 by Peter Heinlein...*

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How complex grammatical structures are used in this S:

↪ The first *well-known* watches (There are watches that are famous? So this is about the first of those)

↪ made in Germany around 1510 by Peter Henlein (this insert tells us who made the first such watch, and when and where it happened)

↪ were so named (this is the predicate of the first clause, telling us why watches are called watches)

↪ because guards or "watchmen" carried small clocks (this is the reason they are called watches)

↪ to keep track of how long to stay at a particular duty post (this is why these watchmen needed clocks).

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In this paragraph, we see a series of cascading comparatives—which call for the reader to construe that the standard of comparison in each case is *than ever before*:

�']➥ Many different skills *went into* (i.e., *contributed to*) making a clock (1st of 2 conjoined clauses)

➥ and new tools and methods were *constantly* being invented (2nd clause, like many in this text, is in the passive voice; *constantly* suggests both pace & frequency of occurrence)

➥ to make ever smaller, (size was a big goal of these efforts)

➥ more complicated mechanisms (Why *more complicated*? Because mechanisms had to do more?)

➥ that worked with greater precision (presumably the other big goal).

• That paragraph illustrates another source of text complexity. There are many ways in which writers can structure the information they present in a text. They can use explicit rhetorical devices: *for example, thus, next, then, etc.*
•A skilled writer like *About Time's* author can signal relationships more subtly:
• *Many different skills went into making a clock, and new tools,* etc. frames the paragraphs that follow: ¶s 4-8 describe some of the skills it took & tools that were devised to make better clocks.

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Summary—this text illustrates many sources of text complexity

- Informational density—many pieces of information and details included in texts like this one. Why, because they are necessary to insure understanding!

- Grammatical complexity—structural devices needed to stuff as much information into text as needed for interpretation can increase complexity considerably.

- Among the devices we looked at—phrases and clauses that situate events in time and place, and relating contingent information, e.g., *instead of depending on...*

- Exploitation of devices such as the passive voice, use of definite and indefinite determiner to structure the reading of the text (e.g., ***The escapement*** indicates this has been previously discussed.)

That's hardly all there is

✦ The features of texts that make them difficult to follow or to process may be similar across texts, there are differences to be found, depending on subject, genre, purpose, and for whom the text was intended.

✦ The language in written texts for adults are less constrained than language used in texts intended to be read by children. If you've looked at the exemplar texts in Appendix B of the CCSS document, you will see that materials are substantially more demanding as you go from elementary to middle to high school.

✦ Higher reading level means greater language demand, and that relates to academic language. But what exactly does that mean?

Requisite language skills

✦ The text we looked at is one type of reading students are expected to do at the fourth & fifth grade—informational texts from which they can expand their knowledge of the history of ideas and the development of the material world they mostly take for granted.

✦ There are many other types of readings—in science, social science, literature, and math. The language register they find in each will present other challenges than some of the ones we found in the Clock and Time text.

✦ Students are expected to expand their language skills to deal with the various types of texts they encounter as they go from grade to grade, towards college or the workplace.

Language prerequisites for literacy & learning…

* A key to understanding the role played by language in literacy & learning is that it is not much like the language ordinarily heard or used in conversation;

* That role requires specialized varieties of language that we might group together for discussion as "academic registers."

* These registers must be learned by children, in addition to the basic spoken language variety, in the course of schooling.

* In many societies this is a recognized function of schooling—it is clear that the written language used for literacy and learning at school is sufficiently different from the spoken varieties that it requires special attention at school (e.g., in some European countries, China and Arabic speaking societies).

Language prerequisites (cont'd)

+ In U. S. schools, little thought or attention is given to the development of these registers of English—until recently, there was little awareness that they even existed.

+ It is assumed that the ability to handle complex texts depends on having strong decoding skills and well-developed vocabulary.

+ In fact, English learners are often taught to decode in English before they have had much opportunity to learn the language at all. Some can do it, although they have little idea what the words they are decoding represent.

+ It should not be surprising then that so many students, speakers and learners of English alike, have difficulty getting beyond a basic level of proficiency in reading, if they get there at all.

Most children need help

✦ The only ones who don't need much help are the lucky ones I mentioned earlier who arrive at school with a running start on literacy. Once they learn to read, they are on their way.

✦ English learners will need instructional support and time to learn enough English to make reading in that language possible.

✦ The children who need the most help with reading and writing are the ones who have not had many the literacy experiences in the early years of life. What kind of help will make the greatest difference? The answer?

✦ What gives some children the special advantages they enjoy? Enrichment, enrichment, enrichment. Forget about drudgery.

Read alouds…
doorway to the world of books—
or, as Jim Trelease puts it:
"commercials for literacy"

To learn any language

* Children must have ample enough contact with the language of literature and literacy in use (this provides data on which they can build their knowledge of how the language works, and practice in using it);

* The data must be "true" to the target—in this case, to academic language.

* They must pay sufficient attention to the language itself, in order to work out the relationships between form, function, and meaning;

* They require the support of speakers of the language who can call attention to such relationships as they come up in texts.

Is the language used in the classroom academic language?

✦ Not really—most of the language spoken in school whether by students or teachers is social and interactive, and falls into the category of more colloquial speech.

✦ Academic language can be spoken (e.g., lectures, commentaries, debates, recitations) or written—but children's most likely encounters with it will be in written texts.

✦ Written texts offer the most reliable access to academic language forms (vocabulary and expressions), structures, and rhetorical features. The problem for ELs and LMs is that the texts they are given tend to avoid such language.

Compare descriptions of Hurricane Katrina, intended Grades 4-6 vs. Grades 2-3…

Something nasty is going on. Studies show that strong hurricanes are becoming more common. Take Hurricane Katrina, for example. She slammed into the Gulf Coast with winds of 145 miles per hour.

The 2005 hurricane season hit the United States hard. Thirteen hurricanes formed over the Atlantic Ocean. That was a record number. Luckily, some didn't strike land. They stayed at sea.

Scientists think the worst is not over. They say the U. S. will likely see a high number of strong hurricanes in the years to come. Why? They're not sure.

Something nasty is going on. Many strong storms formed last year. Take Hurricane Katrina. She had wicked winds. They raced at 145 miles an hour.

Last year had 13 Atlantic hurricanes. That is a record number. More will hit us in years to come. Why? Scientists are not sure.

Which is easier to read?
Which sounds more natural?
Which is more informative?
Which is more interesting?
Which version are ELs & LM students likely to get?

ELs especially are given greatly simplified texts

* The simplified text we just looked at was intended for younger readers, but it is not unlike those used for ELs, LM students, and anyone who might have difficulty reading.

* The rationale for using simplified texts for such students is that ELs and struggling readers will be discouraged by non-simplified texts. But is that true?

* The treatment given to content in simplified materials tends to be pitched at a much lower level than provided for English proficient students. The problem? Simplified texts may easier to "read" without help, if reading does not require that the text make sense, sound natural, or be informative.

The problem for ELs & other language minorities

* Their access to texts that might reveal how academic English works is severely limited by teachers who believe such materials would be far too difficult for them!

* This might be true for the first year of exposure to English, and the materials would be difficult for them to manage on their own for even longer than that—

* But they would not be too difficult with the right kind of instructional support.

* Simplified materials make the task of learning English far more difficult, and they are more difficult to understand!

All students, including ELs, need

- ✦ Compelling and complex grade appropriate texts that are fully aligned with the CCSS, *but not without language support!*

- ✦ That's across the curriculum, and not just in ELD, or ESL, or whatever.

- ✦ The language support should include work on vocabulary—but must go way beyond that!

What students also need

✦ Instructional support from teachers on how language works in course materials the class is working on each day. This is across the curriculum.

✦ These instructional interludes should be part of larger lessons, but nonetheless bounded events in which the students understand that special attention will be given to the language used in texts.

✦ Instructional conversation (preplanned)—engagement of students in discussion focused on various aspects of a sentence or two chosen from those texts for their grammatical features or complexity.

Support for language learning

+ The only way to learn the registers used to carry out academic work is through literacy, and that's only if students actually interact with complex texts in which it figures.

+ Such texts, however, aren't easy to interpret because they are, as we have seen, jammed packed with information. Many students need help unpacking the information from those texts.

+ The most meaningful support is provided by teachers engaging students in instructional conversations in which they draw the students' attention to the ways in which meaning relates to words,phrases, clauses in texts they are working on.

Nota Bene

- There is no way in which academic language could be "taught" or "covered" as a unit, or as a language course, as one might teach ESL or French as a foreign language.

- It is much too pervasive and varied for that kind of treatment. It can be learned only through literacy, and through discussions focused on the relationship between forms, structures and meaning.

- Children need to have their attention called to such relationships because they often do not notice them on their own. The goal is for attention to language becoming a habit of mind. When that happens, they are in a position to acquire it. This is how anyone acquires this register.
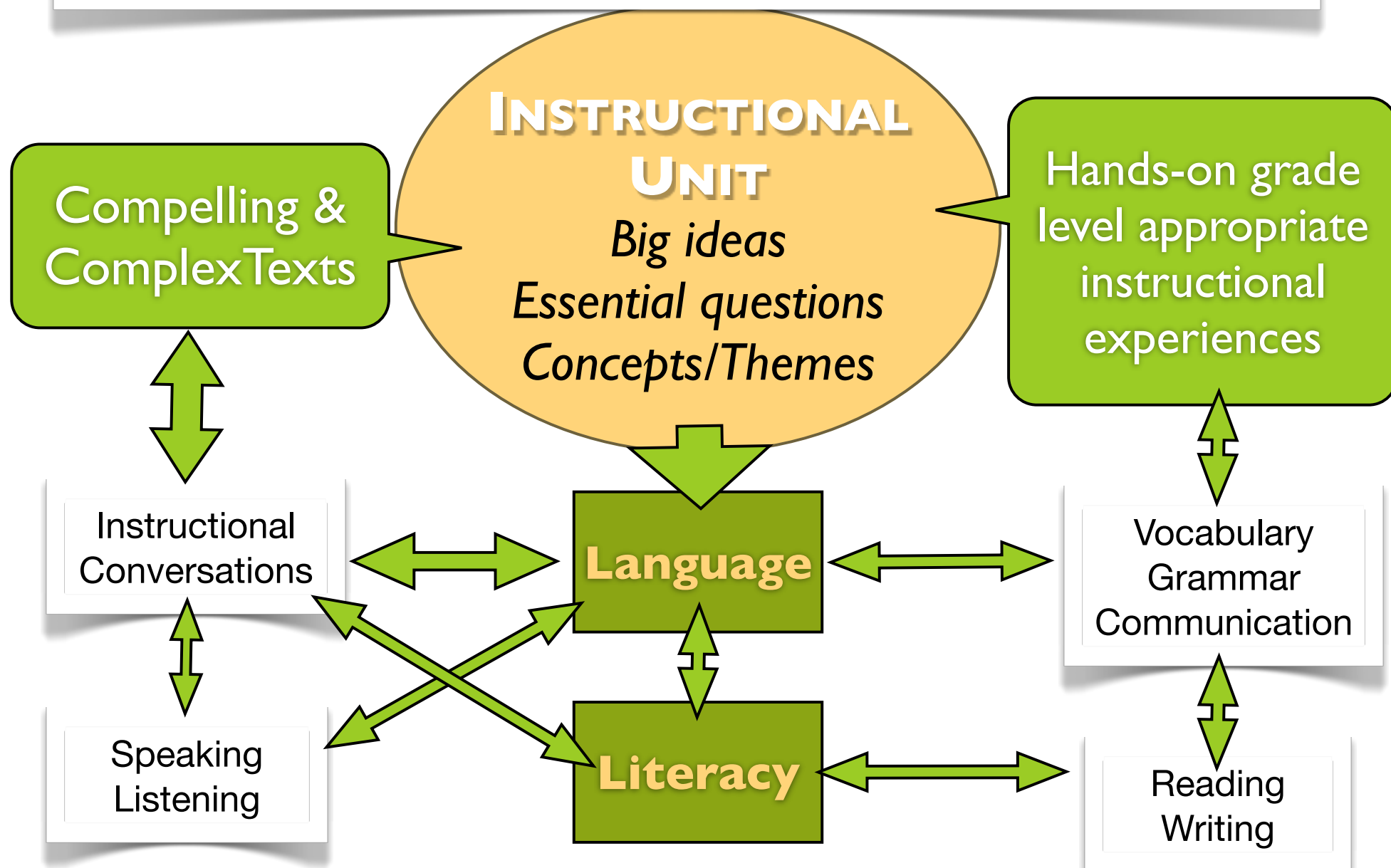
What does this instructional support look like?

- I mentioned instructional conversations focused on the way language works in texts—a strategy teachers in NYC schools have been developing with me over the past 4 or 5 years.

- These conversations are anchored in instructional units in which students learn content through various activities, including reading informational texts and writing.

- We worked mostly on science and social studies topics, avoiding ELA initially, because the schools were nervous about making AYPs.

- Each day, teachers draw a sentence or two from the texts students are reading to feature in an instructional conversation they carry out with the students.

- The sentences they select are ones that are complex enough to deserve attention and discussion.

Want to see how it works?

- We have time for a few short clips to show you how teachers have made it work for students.

- In the first, you will see a second grade class that has been working on a unit on plant growth, the role played by insects in pollination, and on this part of the unit—the mysterious dying off of bees.

- In the second, you will see a middle school class working on a social studies unit on the changes that global warming had on food supply and life in many parts of the world, and the role human activities play in creating those changes.

- In the final clip, you will see a high school global history class discussing the post WWII Nuremberg Military Tribunals.

A CCSS-ready Academic English Curriculum Framework for Instruction for All, including ELs

INSTRUCTIONAL UNIT
Big ideas
Essential questions
Concepts/Themes

Compelling & Complex Texts

Hands-on grade level appropriate instructional experiences

Instructional Conversations

Speaking Listening

Language

Literacy

Vocabulary Grammar Communication

Reading Writing

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How did it all come together?
MaryAnn Cucchiara will explain!