



What the research really
says about text complexity
and learning to read.

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- "The CCSS purport to be grounded in research studies that unambiguously signal the need for sharp increases in academic standards." (Gamson, et al, 2013, p. 381)

CCSS asserts that the research indicates that the difficulty of school readers has declined over the past century.

CCSS & text complexity

An imagined decline in text complexity is "the impetus behind the Standard's strong emphasis on increasing text complexity as a key requirement in reading." (p. 2)

But the "research" cited by CCSS does not indicate a "clear decline" in complexity, nor does the research they didn't cite.

- Rather, the research used by CCSS (Chall, et al, 1977; Hayes, et al, 1996) indicated a reverse normal curve.
- That is, readers were harder in 1910s than in 1950s but began getting more difficult by 1960s and by 2000s readers were more complex than ever.
- A curvilinear array of text difficulty.

Latest analyses...

- So, “imagined” declines in text difficulty because a comprehensive analysis of readers from 1905 to 2004 (Gamson, et al, 2013) indicates that at both 3rd and 6th grade the difficulty of readers either increased between 1950s and 2000s (3rd grade) or remained largely stable (6th grade) across the period of 1950 to 2000s.

CCSS misrepresented the research, said politely...

- "In our examination of the literature on the historical changes in reading textbooks...we discovered several invalid historical assumptions, if not some fairly egregious errors in interpretation." (Gamson, et al, 2013, p. 382)
- Bottom line: Readers today are as hard or harder than readers of the past 65 years, at least in grades K to 6.

So why harder texts?

- Thus, the rationale for the need for more complex texts in the elementary grades has been eliminated.
- But it is in those grades where text difficulty is increased the greatest amount by CCSS.

Why is K-5 doing all the work?

- Hiebert (2013) notes that CCSS sets 163 Lexile levels growth each year in grades K-5 but only 53 Lexile levels of growth per year in grades 6 to 12!
- The CCSS dumps the problem of harder texts on K-5 teachers.

Current reading levels work fine, for the kids who meet them...

- Hiebert (2013) notes the CCSS sets Lexile levels of 790 to 820 as appropriate for end of 3rd grade.
- But the Double Jeopardy study (Hernandez, 2011) reports that 4th grade students with reading levels at the 620 Lexile level were successful in school.

- In addition, two-thirds of 4th graders did not achieve “proficient” status on the 2006 NAEP where Lexile 620 texts were the items.
- If two-thirds of 4th graders cannot meet the proficient standard on 620 Lexile level texts how many 3rd graders will be proficient with texts at Lexile 790-820?

Hard texts and teacher expertise...

- Research indicates that hard texts not only decrease learning but undermine motivation to read.
- Research indicates that far too many K-5 teachers exhibit a low level of expertise when it comes to effective instructional practices (Pianta, et al, 2007).
- Too many classroom teachers have no idea how they might provide instructional scaffolds that would make complex texts manageable for kids.

This is why I worry about the CCSS...

- We have 70 years of evidence that kids are more likely to learn to read and to learn content when the text used can be read with a high level of accuracy and comprehension.
- Also evidence that over two-thirds of all students who take the ACT score well enough in reading to earn at least Cs in college.

So why harder texts?

- School texts have not decreased in difficulty.
- The vast majority of HS graduates read well enough to be successful in college.
- So, why is the plan to make texts and tests harder on the agenda in NYS?
- Wouldn't investing the CCSS dollars in rich professional development opportunities for teachers make more sense?

It all began with Emmet Betts.

- Betts (1946) set criteria for oral reading accuracy and comprehension of texts at different levels of appropriateness for instruction.
- Shanahan (1983) criticized Betts report because of a weak to nonexistent research design.
- Others also criticize Betts' standards.

Bett's levels became the standard.

- Nonetheless, for 70 years Betts' criterion for establishing those reading levels based on oral reading accuracy and comprehension have been tools of the trade when teaching reading.
- As Morris and colleagues (2011) established Betts' "craft knowledge" actually works quite well to describe elementary students reading.

- Betts describes four levels of text difficulty: (1) the basal, or **independent**, level; (2) the **instructional** level; (3) the **frustration** level; and (4) the **probable capacity** level (1946, p. 439).
- Others have set different but similar levels ever since Betts published his criteria.

Recent experimental studies...

- Ehri and colleagues (2007) reported that the progress in reading development made while enrolled in a reading intervention program was, **“explained primarily by one aspect of their tutoring experience – reading texts at a high level of accuracy, between 98% and 100%.”** (p. 441)

O'Connor proves Pimentel wrong

- O'Connor and her colleagues (2002) offered an 18 week daily 30 minute tutorial to 3rd through 5th grade struggling readers.
- Half the subjects were tutored in grade level materials and half were tutored in reading materials matching their reading level.

Just right texts win...

- The matched to reading level texts treatment produced statistically significant growth in comprehension, word identification, word attack and fluency compared to the grade level texts treatment and to no treatment controls.
- **"The proposition that poor readers will make stronger comprehension gains by reading in grade level texts with appropriate support (e.g., assisted reading) was not borne out here." (O'Connor, et al, p. 483)**

CCSS wrong again...

- These findings contradict CCSS author Susan Pimentel.
- **“There is no research that says, if an eighth-grader is reading at a fifth-grade level, and you give him fifth-grade texts, he will catch up.”** (Susan Pimentel cited in Rothman, 2012, p. 4)

But then neither Pimentel nor co-author David Coleman are teachers or researchers. So what do they know?

Meaning vocabulary deficits...

- Struggling readers exhibit huge gaps in the number of words they know the meaning of when compared to on-level achieving readers.
- This vocabulary gap undermines attempts at decoding, reading comprehension, and reading motivation.

Most vocabulary is learned while reading independently (Swanborn & deGlopper, 1999).

The difficulty of the text being read influences incidental vocabulary learning.

Text difficulty and vocabulary learning.

- "The overall likelihood [of learning the meanings of new words through reading] ranged from better than 1 in 10 when children were reading easy narratives to near zero when they were reading difficult expositions." (Anderson, 1996, p. 61)

- Low-achieving readers already voluntarily read substantially less than good readers. (Anderson, et al, 1988; Cunningham & Stanovich, 1997)
- Limited voluntary reading explains most of the vocabulary gap exhibited by low-achieving readers.
- Will giving them even harder texts increase their voluntary reading?

Reading accuracy and on-task behaviors.

- Gambrell, Wilson & Gantt, (1981) found that 61% read texts with 95% accuracy or better, 39% with accuracy below 95%. **Students with easier texts spent 42% of time reading while those with harder texts spent on 22% of time.**
- When students were placed in texts easier than predicted instructional level they were observed to be better behaved and more independent (Jorgenson, 1977).
- Students demonstrated improved time-on-task and comprehension when reading instructional level texts when compared to either independent or frustration level texts. (Gickling, et al, 1985; Treptoe, et al, 2007)

Accuracy and achievement...

- The BTES study was one of the longer studies. Fisher & Berliner (1985) noted that, "The BTES data indicate that *high success* during instruction is especially crucial to the learning rate of low achieving students." (p. 224)
- High-success as in 98-100% accuracy in oral reading.

Accuracy and achievement

- Anderson, Evertson & Brophy (1979) found that the average number of mistakes per oral reading turn was negatively related with achievement.
- They noted "A high rate of success may be especially important when students are asked to read a passage aloud. The more mistakes made during the average reading turn, the lower the achievement." (p. 216)

A huge meta-analysis...

- In their meta-analysis of 180 studies of instructional interventions with learning disabilities students, Swanson and Hoskyn (1998) found that, regardless of the domain of study, *managing task difficulty* was one of **three core instructional variables that explained most of the common variance in achievement outcomes.**

Can we use hard texts to improve achievement?

- There are only a few studies of using frustration level texts with instructional scaffolding to accelerate reading growth.
- This scaffolding is usually 1-1 assisted or repeated readings offered in a variety of formats.

Scaffolding...

- Morgan, Wilcox & Eldredge (2000) found frustration level texts produced growth when better readers provided assisted oral reading support for struggling readers.
- All subjects pretested at nonreader, pre-primer or primer level of reading proficiency.
- Better readers and struggling readers engaged in daily “assisted oral reading”.

Multiple re-readings...

Stahl & Heubach (2005) found that multiple rereadings (10+) along with teacher read aloud allowed students to progress with frustration level texts.

- They also note that, "The instructional reading level for a given child is inversely related to the degree of support given to the reader." (p. 55)

Too few details...

Menon & Hiebert (2010) note that little research has established that harder texts can produce comparable gains to using easier texts and that **fewer studies have depicted the sorts of instructional scaffolding that teachers might provide to make working with harder texts profitable.**

- But if most K-5 teachers have limited expertise in effective reading instruction, how will they acquire the expertise needed to provide effective scaffolding for hard texts?
- Has your school decided to invest in providing all K-5 teachers with 60 hours of targeted professional development?

Problems with the data on accuracy.

- Snow and Juel (2005) "In short, few studies have documented in sufficient detail the form of instruction, the characteristics of texts being read... or the degree of fit of texts to children." (p. 515)
- Allington (1984) noted that there was little agreement amongst various oral reading assessments on what counted as an error or what level of accuracy was appropriate.

- Few studies linking text difficulty to reading development.
- Fewer studies detail the text to reader fit during classroom or intervention reading lessons.
- Fewest studies detail how accuracy was determined.

Conclusions

- The need for harder texts in grades K-5 is not supported by the research available.
- If harder texts are to be used a massive professional development initiative will be needed to develop classroom teachers expertise on effective instructional scaffolding.

- As always, difficult texts will pose problems for students and for their teachers.
- In the end, a little bit of more complex text might be a good thing.
- But the evidence does not support a steady diet of hard texts.

- The need for professional development is already indicated by the failure of two-thirds of 4th graders to meet current NAEP reading standards.
- The problem is not that we need harder texts it is that we need more expert teachers.

What really matters...

When is the initiative to develop teacher expertise going to be placed on the NYS agenda?

- When will the money needed to support this initiative be allocated?
- When will NYS focus money and effort on what really matters?

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