Text Complexity: What is it, Why Does It Matter, and How do I know I am Using Complex Text?
Text complexity is the key to accelerating student achievement in reading.
Purpose: Determine what distinguished the reading performance of students likely to succeed in college and not.

Process:

- Set benchmark score on the reading test shown to be predictive of success in college (“21” on ACT composite score)
- Looked at results from a half million students.
- Divided texts into three levels of complexity: uncomplicated, more challenging, and complex.
Performance on the ACT Reading Test by Comprehension Level
(Averaged across Seven Forms)

Graph showing the average percentage of questions correct for Literal and Inferential levels across different ACT Reading Test scores.

ACT Reading Benchmark
Performance on the ACT Reading Test by Textual Element

(Averaged across Seven Forms)

![Graph showing the performance on the ACT Reading Test by textual element. The graph includes lines for Main Idea/Author's Approach, Supporting Details, Relationships, Meaning of Words, and Generalizations and Conclusions. The x-axis represents the ACT Reading Test Score, and the y-axis represents the average percentage of questions correct. The graph shows a general upward trend with the ACT Reading Benchmark indicated at a score of 21.)
In this figure, performance on questions associated with uncomplicated and more challenging texts both above and below the ACT College Readiness Benchmark for Reading follows a pattern similar to those in the previous analyses. Improvement on each of the two kinds of questions is gradual and fairly uniform.
Text Complexity Matters

• Performance on complex texts is the clearest differentiator in reading between students who are more likely to be ready for college and those who are less likely to be ready.

• Texts used in the ACT Reading Test reflect three degrees of complexity: uncomplicated, more challenging, and complex.
Recap of ACT Findings

Question type and level (main idea, word meanings, details) is NOT the chief differentiator between student scoring above and below the benchmark.

The degree of text complexity in the passages acted as the “sorters” within ACT. The findings held true for both males and females, all racial groups and was steady regardless of family income level.

What students could read, in terms of its complexity--rather than what they could do with what they read—is greatest predictor of success. FCAT has complex passages and highly cognitive demanding questions.
Why Can’t Students Negotiate Complex Text?

- Students who arrive behind in reading or close to grade level are often taught through courses that don’t demand much reading.

- Many students are engaged in shallow reading, skimming text for answers, focusing only on details and failing to make inferences in order to integrate different parts of the text. Years of reading in this superficial way will cause a student’s reading ability to deteriorate.

- For many students the decline of text demands in the courses that they take has both an immediate and long term impact on student achievement.
The Crisis of Complexity

• Complexity of texts students are expected to handle K-12 has eroded:
  – High school textbooks have *declined in all subject areas over several decades.*
  – Average length of sentences in K-8 textbooks have *declined from 20 to 14 words.*
  – Vocabulary demands have *declined, e.g., 8th grade textbooks equivalent to former 5th grade texts; 12th grade anthologies equal to former 7th grade.*

• Complexity of college and careers texts have remained steady or increased:
  – Lexile scores of college textbooks have *not decreased in any block of time since 1962 and in fact have increased.*
  – Vocabulary difficulty of newspapers has remained *stable.*
  – Word difficulty of scientific journals and magazines 1930–1990 has increased since 1930.
The Crisis of Complexity

“While reading demands in college, workforce training programs, and life in general have held steady or increased over the last half century, K–12 texts have actually declined in sophistication, and relatively little attention has been paid to students’ ability to read complex texts independently.

These conditions have left a serious gap between many high school seniors’ reading ability and the reading requirements they will face after graduation.

—Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects, Appendix A

National Accessible Reading Assessment Projects
Text Complexity and the Common Core State Standards

The Common Core State Standards Initiative places a strong emphasis on the role of text complexity in evaluating student readiness for college and careers.

“The Common Core Standards hinge on students encountering appropriately complex texts at each grade level in order to develop the mature language skills and the conceptual knowledge they need for success in school and life” (p. 3).

Just Read, Florida!
Text Complexity in the Common Core State Standards

Standard 10 of the Common Core:

• Expects students to read and comprehend complex literary and informational texts independently and proficiently

• Defines a grade-by-grade “staircase” of increasing text difficulty that rises from beginning reading to the college and career readiness level.
Text Complexity in the Common Core State Standards

Specifically, within reading standard #10:

Anchor Standard:

• R.CCR.10 Read and comprehend complex literary and informational texts independently and proficiently.

Example Grade-level Standard (6th grade):

• RI.6.10 By the end of the year, read and comprehend literary nonfiction in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
Guiding Questions

What do the Common Core Learning Standards mean by text complexity?

What is a text complexity band?

*and*

How do we ensure the texts our students are reading are in the appropriate text complexity band?
The Common Core Standards' three equally important components of text complexity.

**Quantitative measures** – readability and other scores of text complexity often best measured by computer software.

**Qualitative measures** – levels of meaning, structure, language conventionality and clarity, and knowledge demands often best measured by an attentive human reader.

**Reader and Task considerations** – background knowledge of reader, motivation, interests, and complexity generated by tasks assigned often best made by educators employing their professional judgment.
Where do we find texts in the appropriate text complexity band?

We could....

Choose an excerpt of text from Appendix B as a starting place:

Use available resources to determine the text complexity of other materials on our own.

or....

![Image of Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects Appendix B: Text Exemplars and Sample Performance Tasks]

<table>
<thead>
<tr>
<th>Text Complexity Grade Bands</th>
<th>Suggested Lexile Range</th>
<th>Suggested ATOS Book Level Range***</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-1</td>
<td>100L – 500L*</td>
<td>1.0 – 2.5</td>
</tr>
<tr>
<td>2-3</td>
<td>450L – 790L</td>
<td>2.0 - 4.0</td>
</tr>
<tr>
<td>4-5</td>
<td>770L – 980L</td>
<td>3.0 - 5.7</td>
</tr>
<tr>
<td>6-8</td>
<td>955L – 1155L</td>
<td>4.0 - 8.0</td>
</tr>
<tr>
<td>9-10</td>
<td>1080L – 1305L</td>
<td>4.6 - 10.0</td>
</tr>
<tr>
<td>11-CCR</td>
<td>1215L – 1555L</td>
<td>4.8 - 12.0</td>
</tr>
</tbody>
</table>
Determining Text Complexity

A Four-step Process:

1. Determine the quantitative measures of the text.

2. Analyze the qualitative measures of the text.

3. Reflect upon the reader and task considerations.

4. Recommend placement in the appropriate text complexity band.
Step 1: Quantitative Measures

Quantitative Measures

Measures such as:
- Word length
- Word frequency
- Word difficulty
- Sentence length
- Text length
- Text cohesion
<table>
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</tr>
</tbody>
</table>

Common Core State Standards
Quantitative Measures Ranges for Text Complexity Grade Bands
Step 1: Quantitative Measures

Remember, however, that the quantitative measures is only the first of three “legs” of the text complexity triangle.

Our final recommendation may be validated, influenced, or even over-ruled by our examination of qualitative measures and the reader and task considerations.
Step 2: Qualitative Measures

Measures such as:
- Structure
- Language Demands and Conventions
- Knowledge Demands
- Levels of Meaning/Purpose
Common Core Standards
Qualitative Features of Text Complexity

Language Demands: Conventionality and Clarity

- Literal $\rightarrow$ Figurative or ironic
- Clear $\rightarrow$ Ambiguous or purposefully misleading
- Contemporary, familiar $\rightarrow$ Archaic or otherwise unfamiliar
- Conversational $\rightarrow$ General Academic and domain specific
- Light vocabulary load: few unfamiliar or academic words $\rightarrow$ Many words unfamiliar and high academic vocabulary present
- Sentence structure straightforward $\rightarrow$ Complex and varied sentence structures
- Though vocabulary can be measured by quantifiable means, it is still a feature for careful consideration when selecting texts
- Though sentence length is measured by quantifiable means, sentence complexity is still a feature for careful consideration when selecting texts
Common Core Standards
Qualitative Features of Text Complexity
Knowledge Demands: Life Experience

- Simple theme $\rightarrow$ Complex or sophisticated themes
- Single theme $\rightarrow$ Multiple themes
- Common everyday experiences or clearly fantastical situations $\rightarrow$ Experiences distinctly different from one’s own
- Single perspective $\rightarrow$ Multiple perspectives
- Perspective(s) like one’s own $\rightarrow$ Perspective(s) unlike or in opposition to one’s own
- Everyday knowledge $\rightarrow$ cultural and literary knowledge
- Few allusions to other texts $\rightarrow$ many allusions to other texts
- Low intertextuality (few or no references to other texts) $\rightarrow$ high intertextuality (many references or citations to other texts)
Common Core Standards
Qualitative Features of Text Complexity

Levels of Meaning (chiefly literary texts) or purpose (chiefly informational texts)

• Single level of meaning → Multiple levels of meaning
• Explicitly stated purpose → Implicit purpose, may be hidden or obscure
Common Core Standards
Qualitative Features of Text Complexity

Structure

• Simple $\rightarrow$ Complex
• Explicit $\rightarrow$ Implicit
• Conventional $\rightarrow$ Unconventional
• Events related in chronological order $\rightarrow$ Events related out of chronological order (chiefly literary texts)
• Traits of a common genre or subgenre $\rightarrow$ Traits specific to a particular discipline (chiefly informational texts)
• Simple graphics $\rightarrow$ sophisticated graphics
• Graphics unnecessary or merely supplemental to understanding the text $\rightarrow$ Graphics essential to understanding the text and may provide information not elsewhere provided
Step 2: Qualitative Measures

Because the factors for literary texts are different from information texts, the text type should be given consideration while using the rubric for rating. However, the formatting of each document is exactly the same.

And because these factors represent continua rather than discrete stages or levels, numeric values are not associated with these rubric. Instead, six points along each continuum is identified: not suited to the band, early-mid grade level, mid-end grade level, early-mid grade level, mid-end grade level, not suited to band.
Step 3: Reader and Task

Considerations such as:

- Motivation
- Knowledge and experience
- Purpose for reading
- Complexity of task assigned regarding text
- Complexity of questions asked regarding text
What Complex Text Demands of Readers

• **A Willingness to Pause and Probe**
  - Students must be patient as they read complex texts and be willing to devote time to contemplation of the text

• **The Capacity for Uninterrupted Thinking**
  - Time devoted to the text and thinking about the text exclusively - single-tasking rather than multi-tasking

• **A Receptivity to Deep Thinking**
  - Contemplation of the meaning of the text and not a quick response voicing an opinion based on a shallow interpretation

(Mark Bauerlein, 2011)

Just Read, Florida! Office
Step 3: Reader and Task
Ten Guiding Principles

1. Make close reading and rereading of texts central to lessons.

2. Provide scaffolding that does not preempt or replace text.

3. Ask text dependent questions from a range of question types.

4. Emphasize students supporting answers based upon evidence from the text.

5. Provide extensive research and writing opportunities (claims and evidence).
6. Offer regular opportunities for students to share ideas, evidence and research.

7. Offer systematic instruction in vocabulary.

8. Ensure wide reading from complex text that varies in length.

9. Provide explicit instruction in applied grammar and conventions.

10. Cultivate students’ independence.
The study of short texts is useful to enable students at a wide range of reading levels to participate in the close analysis of more demanding text.

Place a high priority on the close, sustained reading of complex text. Such reading emphasizes the particular over the general and strives to focus on what lies within the four corners of the text.

Close reading often requires compact, short, self-contained texts that students can read and re-read deliberately and slowly to probe and ponder the meanings of individual words, the order in which sentences unfold, and the development of ideas over the course of the text.

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An Example of Complex Text: The Gettysburg Address
As I read aloud the text, please follow along, and highlight each “here”.

Why did Lincoln repeat this word so many times?
What are the two meanings that he used for this word?
Which two groups are contrasted in the speech? In your small table groups, work to find four implied contrasts.
### Implied Contrasts

<table>
<thead>
<tr>
<th>Passive and Receptive</th>
<th>Active and Productive</th>
</tr>
</thead>
<tbody>
<tr>
<td>We say here</td>
<td>They did here</td>
</tr>
<tr>
<td>We have unfinished work</td>
<td>They nobly advanced work</td>
</tr>
<tr>
<td>We take devotion</td>
<td>They gave devotion</td>
</tr>
<tr>
<td>Us the living</td>
<td>These honored dead</td>
</tr>
</tbody>
</table>

Our passivity is inferior to their activity. But at last we are given an activity (to be here dedicated to the great task remaining) which provides moral equilibrium. We are coiled by the Address, and then sprung.

Just Read, Florida!
Earth

“shall not perish from the earth”

The cemetery at Gettysburg is a place where the earth receives the dead. The earth, and all the references to it (field, resting place, ground), forms a continuous web of meaning.

Highlight all the references to a place – ie, nation, world, etc.

Discuss why President Lincoln is giving such prominence to the geographical place.

Just Read, Florida!
Earth

At the very end of the Address, where Lincoln specifies the earth as the place where the principle of the living nation will continue its life, he abruptly – with his last word – in an instant, transforms the resting place of the dead to the habitation of a vital principle….the unity of the dead with the living is consummated in Mr. Lincoln’s last word, the common home of all.

Just Read, Florida!
Verbs

What verb did Mr. Lincoln use the most, six times in fact?

• In your group, discuss the meaning of this verb the first two times Lincoln uses it. What other verb is closely linked to it those first two times it appears?
• How is this verb used the next two times and how does it relate to consecrate?
• How is this verb used the last two times and how does it relate to devoted.
Questions to Discuss

• When was “four score and seven years ago?”
• What important thing happened?
• Who are our fathers?
• What does conceived mean?
• What does proposition mean?
• What is new about America? Is he saying no one has been free or equal before? So what is new?
In the beginning, the nation is brought forth, and at the end the nation has a new birth of freedom.

The issue, finally, is not the life and death of the fallen, but the life and death and resurrection of the nation.
Writing in Response to Reading

• Now take the two paragraphs and write them in your own words in a few sentences.

• Please do not summarize, but paraphrase, put these two paragraphs in your own words.

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Text Dependent Questions- Scaffolding Students to Read Complex Text

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High Quality Text Dependent Questions

• High-quality sequences of text-dependent questions elicit sustained attention to the specifics of the text and their impact. The sequence of questions should cultivate student mastery of the specific ideas and illuminate particulars of the text.

• High-quality text-dependent questions will often move beyond what is directly stated to require students to make non-trivial inferences based on evidence in the text. Questions aligned with Common Core State Standards should demand close attention to the text to answer fully.
High Quality Text Dependent Questions

• An effective set of questions might begin with relatively simple questions requiring attention to specific words, details, and arguments and then move on to explore the impact of those specifics on the text as a whole.

• Good questions will often linger over specific phrases and sentences to ensure careful comprehension. Effective question sequences will build on each other to ensure that students learn to stay focused on the text so they can learn fully from it.
Scaffolding for Independence

Rather than emphasizing more general strategies and questions, text specific questions and tasks reinforce focus on the text and cultivate independence.

- Have students spend time reading the text closely rather than engaging in extensive pre-reading activities and instruction in reading strategies.
- Be sure students are doing the work! Allow them the intellectual experience of encountering the way an author sets the agenda and unfolds ideas as well as details.
- Recommended reading strategies as well as broader questions and themes should be embedded in the actual reading of the text rather than being taught as a separate body of material.

Just Read, Florida!
Contact Information

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Just Read, Florida!
Comprehension Instructional Sequence
Health Lesson: Food Addiction

Just Read, Florida!
Comprehension Instructional Sequence (CIS)

Step One
Topic Question

Before reading:

What qualifies as an addiction?
Predictive Writing

Before text reading: Use the Essential Question Handout to record your answer to this question:

Predict how environmental factors can affect personal health.

Base your response on your current background knowledge.
Vocabulary Front Loading

- Words for Vocabulary Word Wall:
  - Words introduced in this section: *anterior cingulate cortex, medial orbitofrontal cortex*
  - Word introduced previously in text-reading: *sustainable*
Listen as the facilitator reads the following text: “Food Addiction Works Like Drug Addiction in the Brain”

Mark the text with the following codes:

- **H** – This section of text includes information presented as a scientific hypothesis.
- **FI** – This section of text includes information presented as a scientific finding.
- **FA** – This section of text includes information presented as a scientific fact.
Text Marking

- **After text marking:**
- In small groups, compare and discuss differences in text coding.
- Support your suggested answers from the text.
Directed Note-taking

Guiding Question: According to the article, which factors impact health choices?

- Visual Cues
- Food Selection
- Brain Function
- Willpower

Be sure to utilize the text features such as charts, graphs, photographs, and illustrations as you take notes
After Directed Note-taking

Compare notes in pairs or small groups
Place a star next to the most significant note in each category:
- Visual Cues
- Food Selection
- Brain Function
- Willpower
After Directed Note-taking

- Take positions and discuss which of the following factors have the most significant impact health choices. Use text to justify all positions.
  - Visual Cues
  - Food Selection
  - Brain Function
  - Willpower
First Writing Response After Reading

After the initial reading, use the Essential Question Handout in the participant notebook to answer the following question:

- According to the text and your directed note-taking discussion, which environmental factors strongly effect personal health?
Comprehension Instructional Sequence (CIS)

Step Two
Question Generation

1. Do olfactory (smelling) cues have the same effect?
2. How many other known visual cues are believed to have a similar effect on brain function?

Generate questions unanswered from your first text reading. Record your questions on your Student Question Generation paper as you work in pairs or small groups.
Question Generation

Share questions with the whole group to identify which are common, and which questions are most relevant to the topic and/or significant to learning.

Record/post common and relevant/significant questions on the Question Generation Poster for future use in:
* extended text discussion
* seeking answers in text-reading throughout the remainder of the chapter/unit
* focusing on unanswered questions in collaborative inquiry.
Comprehension Instructional Sequence (CIS)

Step Three
According to the text and further discussion, in your opinion, which environmental factor most strongly effects personal health?

Use information from notes to help write final response on the Essential Question Handout. Share answers in small groups. As part of whole class discussion, record responses to the essential question in multiple choice format.
The Comprehension Instructional Sequence Facilitates Students:

- Using background knowledge, i.e., predicting, inferring
- Identifying key ideas from text
- Learning and using text structures
- Monitoring comprehension and employing fix-up strategies
- Using a variety of reading strategies effectively
- Paraphrasing, explaining, and summarizing information to construct conclusions
- Engaging in question generation
- Extended text discussion and writing
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