Closing the Gap in What High Schoolers Read and What College Expects

Jason Turner
Director of Professional Development,
MetaMetrics
“If we can dramatically increase high school graduation rates, if we can dramatically increase the number of graduates who are college and career ready, that’s what this is about. Everything’s a means to that end. That’s the Holy Grail here. Are our students being prepared to be successful?”

-Arne Duncan

*Education Week,* December 9, 2009
Quick Facts

- Each year, approximately 1.2 million students fail to graduate from high school, more than half of whom are from minority groups.
- Percent of freshmen that enroll in at least one remedial course

<table>
<thead>
<tr>
<th>Community College</th>
<th>Four-Year Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>42%</td>
<td>20%</td>
</tr>
</tbody>
</table>

*Alliance for Excellent Education, February 2009 edition.*
“College and Career Readiness”

February, 2011

[Google search for "college and career readiness"

About 1,510,000 results (0.20 seconds)

June 13, 2013

[Google search for "college and career readiness"

About 5,360,000 results (0.43 seconds)
What is The Lexile Framework for Reading?

- An educational tool – *a scale* - that links reading material and readers under a common metric – the Lexile.
  - Measures the complexity of reading material
  - Measures the reading level of individual readers
Two Underlying Concepts

- **Text Complexity**
  - Certain features inherent in reading material that make it more or less difficult to read.
Two Underlying Concepts (cont...)

- **Reader Level**
  - The ability of a reader to derive meaning from what they are reading.
The Lexile Framework for Reading

A Lexile is a measure of both reading level and text complexity, *on the same scale.*

A student’s Lexile measure is her reading level.

A book’s Lexile measure is its reading difficulty.

an 870L reader

an 870L book
Median Text Measures:

- 11th/12th grade (LA/SS textbooks): 1090L
- Military (training/field manuals): 1180L
- Citizenship (newspapers, voting, jury): 1230L
- Workplace (Daggett study materials): 1260L
- Postsecondary - first two yrs (textbooks): 1355L
  - GED Test Materials: 1060L
  - SAT/ACT Test Materials: 1180L
Texas Higher Education Coordinating Board (THECEB)

Texas Higher Education Coordinating Board

Text Measurement and Analysis

MetaMetrics Technical Report Update
August 29, 2008
Distribution of Text Readability Measures for the Texas Higher Education Coordinating Board
(Box Plots: min, 25th, 50th, 75th, max)

Lexile Measure

- Community/Technical College (N=37)
- Community College (N=48)
- Four-Year (N=52)
- All (N=137)

Standard = 1015L
THECB = 1170L
Commended = 1490L
College and Career Readiness Skills

Reading Demand of Newspapers

- USA Today
- Wall Street Journal
- New York Times
- Washington Post
- Chicago Tribune
- Reuters
- Associated Press
College and Career Readiness Skills
Reading Demand of Newspapers

- USA Today (1200L)
- Associated Press (1310L)
- Chicago Tribune (1310L)
- Wall Street Journal (1320L)
- Washington Post (1350L)
- NY Times (1380L)
- Reuters (1440L)
College and Career Readiness Skills
Citizenship Demands

- Federal Tax Form W-4
- Aetna Health Care Discount Form
- GM Protection Plan
- Medical Insurance Benefit Package
- Application for Student Loan
- CD-DVD Player Instructions
- Installing Your Child Safety Seat
- Microsoft Windows User Manual
College and Career Readiness Skills

Citizenship Demands

- CD-DVD Player Instructions (1080L)
- GM Protection Plan (1150L)
- Microsoft Windows User Manual (1150L)
- Installing Your Child Safety Seat (1170L)
- Federal Tax Form W-4 (1260L)
- Application for Student Loan (1270L)
- Medical Insurance Benefit Package (1280L)
- Aetna Health Care Discount Form (1360L)
The English Language Arts Standards: Key Changes (Shifts)

1) Text Complexity
2) Balance of fiction/non-fiction
3) Analysis, inference, and evidence
4) Mastery of writing and speaking
5) Academic Vocabulary

The Goal is College and Career Readiness
Appendix A: Findings

- Students who fall short of ACT's college readiness benchmarks have the greatest difficulty with the test items involving the most complex text.

- K-12 reading assignments have become much less demanding in the last half-century, with an especially large drop-off in high school expectations.

Appendix A: Findings

- College reading assignments have moved in the opposite direction, becoming a bit harder over the same fifty years.

- High school teachers commonly give students many kinds of support and coaching to help them figure out the material, but college teachers expect students to pull the knowledge from the text on their own, making the gap in practical ability even wider than the gap in the texts themselves.
Common Core Appendix A

Table 1. Text Complexity Grade Bands and Associated Lexile Ranges

<table>
<thead>
<tr>
<th>Text Complexity Grade Bands</th>
<th>Lexile Ranges Aligned to College- and Career-Readiness Expectations*</th>
</tr>
</thead>
<tbody>
<tr>
<td>K–1</td>
<td>N/A</td>
</tr>
<tr>
<td>2–3</td>
<td>420L–820L</td>
</tr>
<tr>
<td>4–5</td>
<td>740L–1010L</td>
</tr>
<tr>
<td>6–8</td>
<td>925L–1185L</td>
</tr>
<tr>
<td>9–10</td>
<td>1050L–1335L</td>
</tr>
<tr>
<td>11–CCR</td>
<td>1185L–1385L</td>
</tr>
</tbody>
</table>

Note: There is an infinity of ways of connecting a single starting point in grade 1 to a single ending point in grade 12. Each of these ways may find a supportive constituency and a constituency in opposition.

*Grade bands reflect the 2012 Revised Appendix A of the Common Core State Standards for English Language Arts.
Addressing the Gap

1) Implementing the Common Core State Standards
2) Focusing on Summer Learning Loss
3) Increased emphasis on informational texts
4) K-3 ELA Emphasis
   A. Identify
   B. Intervene
   C. Personalized Learning Platforms
Common Core State Standards: Adoption vs Implementation

June 13, 2013

Google search for "adopting common core standards"

About 7,950,000 results (0.31 seconds)

June 13, 2013

Google search for "implementing common core standards"

About 2,810,000 results (0.32 seconds)
Estimated Cumulative Differences in Language Experience by 4 Years of Age

- **Professional Family**
- **Working-Class Family**
- **Low Income Family**

<table>
<thead>
<tr>
<th>Age of Child in Months</th>
<th>Estimated Cumulative Words Addressed to Child (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>48</td>
<td>40</td>
</tr>
</tbody>
</table>

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Mitigate Summer Learning Loss

Summer Learning Research

• By the end of 5th grade, low-income children are approximately 2.5 years behind their more affluent peers in reading ability, primarily because of summer learning loss

Summer Learning Research

- Entwisle, Alexander and Olson (1997)
- Random sample of 800 Baltimore public school students.
- Children from families of high- and low-Socio-Economic Status made equivalent gains on math and reading during the school year.
- Achievement of students from low-income families either fell or stagnated during summer.
Summer Learning Research

- **Middle-income students typically experience slight gains in reading performance** over the summer months, while low-income students experience an average summer learning loss in reading achievement of over two months (John Hopkins University Center of Summer Learning; Cooper, Nye, Charlton, Lindsay and Greathouse, 1996).

- **Of even greater concern is the fact that these losses are cumulative**, creating a wider gap each year between more proficient and less proficient students. By the time a struggling reader reaches middle school, summer reading loss has accumulated to a two–year lag in reading achievement (Allington, 2007).

- **Summer setback explains approximately 80 percent of the reading achievement gap** between poor and nonpoor students at age 14 (Hayes and Grether, 1983; Alexander, Entwistle, and Olsen, 2007).
Reading Lists: One Size Does NOT Fit All!

- They don’t cover enough of the ability range for a grade
- They don’t take an individual reader’s interests into account
- They are organized alphabetically rather than by text difficulty or theme
- Their length intimidates reluctant readers
- They don’t include summaries, page counts, or book cover images
Summer Learning Research

- Project READS randomized field trial
- Low-income students made summer gains when reading materials were:
  - In students’ selected areas of interest
  - Reader level and text difficulty were matched using Lexiles
- Gains comparable to those made in summer school.
www.lexile.com/fab
Find the Right Book for You!
Enter your Lexile measure, select your interests, and find books you'd like to read!

Looking for Spanish books?

Step 1: Enter Lexile Measure or Grade

My Lexile measure is

Lexile Measure: L

Lexile Range: L to L

I don't know my Lexile measure

My Current Grade is:

Kindergarten

Options:
- I find the books I read for school difficult.
- I find the books I read for school just right.
- I find the books I read for school easy.
Find the Right Book for You!
Enter your Lexile measure, select your interests, and find books you’d like to read!

Looking for Spanish books?

Find a Book

Step 2: Select Interests Categories

Please select one or more interests below. Click the [+] button to view and select subcategories. You will be able to refine your selection(s) later on.

All Categories | Deselect Categories

- Adventure [+]  
- Animals [+]  
- Art [+]  
- Biography [+]  
- Business & Law [+]  
- Fairy Tales, Myths, & Folktales [+]  
- Family, Childhood, & Education [+]  
- Fantasy [+]  
- Fiction & Literature [+]  
- Food & Home [+]  
- Military [+]  
- Music, TV, Movies, & more [+]  
- Mystery [+]  
- Nature [+]  
- Philosophy [+]  
- Reference & Languages [+]  
- Religion & Beliefs [+]  
- Romance [+]  
- Science & Technology [+]  
- Social Issues [+]
### College and Career Readiness Skills

**Increased Use of Informational Text**

#### Literary vs. Informational Text

(First grade classroom)

<table>
<thead>
<tr>
<th>Amount of informational text found in classroom libraries and other materials</th>
<th>Amount of materials on classroom walls and other surfaces centered around informational text</th>
<th>Minutes per day spent on informational texts</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.8%</td>
<td>2.6%</td>
<td>3.6</td>
</tr>
</tbody>
</table>

### College and Career Readiness Skills

#### Increased Use of Informational Text

<table>
<thead>
<tr>
<th>Grade</th>
<th>Literary</th>
<th>Informational</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>8</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>12</td>
<td>30%</td>
<td>70%</td>
</tr>
</tbody>
</table>
Instructional Tools & Resources that Promote Differentiated Instruction & Deliberate Practice

Research suggests that a novice develops into an expert through an intricate process that includes:

- **Targeted practice** in which one is engaged in developmentally appropriate activities
- **Real-time corrective feedback** that is based on one’s performance
- **Intensive practice** on a daily basis that provides results that monitor current ability
- **Distributed practice** that provides appropriate activities over a long period of time (i.e., 5–10 years), which allows for monitoring growth towards expert performance
- **Self-directed practice** for those times when a coach, mentor or teacher is not available

Glaser, 1996; Kellogg, 2006; Shea & Paull, 1996; Wagner & Stanovich, 1996
Next Generation Assessments

Important Features

• **Blending of assessment and instruction** – it’s possible to ‘mine the exhaust’ of the instructional experience for assessment data

• **Computer adaptive** assessments can be applied to instructional content, e.g. test items are targeted to the individual

• Assessment engines can connect day-to-day progress with year-to-year summative tests by reporting on common developmental scales
Next Generation Assessments

Important Features

• Perspectives and monitoring can be longitudinal across the developmental lifespan of the student for each construct and used to track college and career readiness.

• The focus is ‘student-centric’ by focusing on the critical components of skill acquisition: targeted practice, corrective feedback, intensive practice, distributed practice, and opportunity for self-directed practice.
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