#### **MetaMetrics**®

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# SRA FLEX Literacy ™ and The Lexile® Framework for Reading



## **TEXT COMPLEXITY**

Lexile® measures offer an invaluable way to match students with text and to facilitate reading growth. By practicing reading skills within a well-targeted text range, readers are able to strengthen their reading level. Lexile measures enable differentiated reading for both at-risk and struggling readers as well as proficient or advanced readers. In addition to providing a way to target students at a targeted reading level to facilitate reading growth and increased comprehension, Lexile measures also offer a way to track student progress toward college and career readiness.

The *SRA FLEX Literacy* assessment system employs The Lexile Framework for Reading to ensure that students are matched with reading materials at an appropriate level that provides challenge, but avoids frustration. All measures (of text complexity and student ability) within *SRA FLEX Literacy* are calculated using the Lexile® Analyzer and the Lexile scale developed by MetaMetrics.

McGraw-Hill developed *SRA FLEX Literacy* to address the need for students to read often and read material at the right level of complexity. The assessment components of *SRA FLEX Literacy* help to personalize the reading experience for students and provide valid and reliable indicators of student reading ability. Educators can better prepare students for success with the state standards, and to use *SRA FLEX Literacy* to monitor reading progress and growth.

### The Lexile Framework for Reading: Background

What is the Lexile Framework for Reading?

Developed by MetaMetrics, the Lexile Framework for Reading is a scientific, proven approach to reading and text measurement that can be implemented by educators, parents, and readers of all ages. The Lexile Framework is the result of more than 25 years of ongoing research based on two well-established predictors of text complexity. By measuring both text difficulty and reader level on the same scale, readers can be appropriately matched with texts that will be both engaging and challenging.

The Lexile Framework for Reading consists of two main components: a Lexile measure and the Lexile scale. A Lexile measure is the numeric representation of a reader's ability or a text's difficulty, both followed by an "L" (for Lexile). The Lexile scale is a developmental scale for reading ranging from below 200L for beginning readers and texts to above 1600L for advanced readers and texts. A unique feature of the Lexile scale is that both student level and text difficulty are measured on the same scale, in the same units, which are called Lexile measures.

Use of the Lexile scale is ubiquitous around the globe. Hundreds of publishers measure their titles using the Lexile scale and over 100 million online articles and resources have received Lexile measures (and that number increases every month). Because Lexile measures are used to measure the complexity of texts, the measures can be found in many public and school libraries and even large retail booksellers, like Amazon and Barnes & Noble. Additionally, MetaMetrics has a book database of over 150,000 measured titles. Also, most major norm-referenced and criterion-referenced assessments report Lexile measures. And a wide range of reading programs and summative assessments are linked with the Lexile scale. This ubiquity means that not only can Lexile measures be obtained for most students across a wide variety of assessments, but that – once measured – students can easily be matched with a large selection of texts, including, books, magazines, articles, and online resources, and reading programs. It is important to note that SRA FLEX Literacy reports a student Lexile measure every time a student completes an embedded assessment. This ease of access when it comes to monitoring student reading growth is a critical benefit of SRA FLEX Literacy (MetaMetrics, Inc., 2012)

#### Using The Lexile Framework for Reading

Though there are multiple ways to measure text complexity, Lexile measures provide a scientific approach to measuring the quantitative dimensions of a text. That is, Lexile measures are based on the semantic and syntactic dimensions of a text (Lennon & Burdick, 2004). Lexile measures are derived from measuring variables like sentence length and vocabulary difficulty. While there are multiple ways to measure text complexity, these two variables have reliably been shown to be excellent predictors when it comes to measuring the complexity of a text (Lennon & Burdick, 2004). For example, the selection below is taken from Camping is Fun by Mary Garcia and measures relatively low on the Lexile scale (200L):

We went camping. On Monday, we put up the tent. The tent fell down! On Tuesday, we hiked. It rained and we got wet! On Wednesday, we fished. Uncle Pete caught a boot! On Thursday, we left food on the table. The raccoons ate it! On Friday, we cooked marshmallows. They fell in the fire! On Saturday, we heard a strange noise. We were too scared to sleep! On Sunday, we went home. "Did you like camping?" asked Uncle Pete. "Yes!" we said. "Camping is fun!"

By way of comparison, contrast that relatively simple passage with this excerpt from the first inaugural address of George Washington, which measures much higher on the Lexile scale at 1880L:

Among the vicissitudes incident to life no event could have filled me with greater anxieties than that of which the notification was transmitted by your order, and received on the 14th day of the present month. On the one hand, I was summoned by my Country, whose voice I can never hear but with veneration and love, from a retreat which I had chosen with the fondest predilection, and, in my flattering hopes, with an immutable decision, as the asylum of my declining years--a retreat which was rendered every day more necessary as well as more dear to me by the addition of habit to inclination, and of frequent interruptions in my health to the gradual waste committed on it by time.

A side-by-side comparison reveals some rather obvious differences, namely the level of vocabulary between the two passages, as well as the sophisticated sentence structure of the latter as contrasted with the former.

It should be noted that there are other factors that should be considered in the measurement of a text. These factors include certain qualitative dimensions like the structure of the text, language conventionality, levels of meaning, etc. Teachers and parents will also want to consider the demands of matching reader to text and task. For example, educators may ask about a student's motivation, the context of the reading assignment, or what the purpose of the reading task is. It's important to note that Lexile measures are an important piece of the text complexity puzzle. After all, comprehending a text requires the ability to understand the words and sentences being used. But the Lexile measure of a text is certainly not the only piece of the puzzle. The Lexile measure of a text should be used alongside a host of other variables in determining appropriate text levels for specific students.

When used appropriately, however, Lexile measures offer an invaluable way to match students with text and to facilitate reading growth. By practicing reading skills within a well-targeted text range, readers are able to strengthen their reading level. As a reader's level increases, the text level he can comprehend also increases. Lexile measures enable differentiated reading for both at-risk and struggling readers as well as proficient or advanced readers. In addition to providing a way to target students at a targeted reading level to facilitate reading growth and increased comprehension, Lexile measures also offer a way to track student progress toward college and career readiness. Because Lexile measures are applicable to most forms of prose texts, they may be used across curricula and content areas. Finally, because of the ubiquity of the Lexile measure, all stakeholders – from parents, to educators, to district personnel, to young readers – can participate in fostering reading growth and development.

Although the Lexile measure is an excellent quantitative tool for measuring both reader and text, it is important to note a few specific limitations. First, Lexile measures do not indicate age-appropriateness. Because the Lexile scale is used to measure text complexity and reader level, the content of the text is not measured -- meaning that decisions about age-appropriate content are best left to educators, parents, or readers. And Lexile measures are not an adequate guide in determining age-appropriate text. In other words, just because a reader can read a text does not mean they should read that particular text. Second, Lexile reader measures do not account for a reader's interest or level of background knowledge. In some instances, a motivated reader with a great deal of background knowledge or strong interest in a particular topic may read at a higher than predicted level. And those motivated readers should be encouraged to grapple with higher levels of text challenge, particularly if they have a high degree of background knowledge or interest.

#### College & Career Readiness and The Lexile Framework for Reading

In addition to the various instructional benefits offered by the Lexile Framework, the framework also offers state and district personnel and educational leaders a way to gauge college and career readiness. Recently, educational leaders have shifted from asking only if students are "proficient" on state assessments, to asking more incisively if today's students are graduating college and career ready. That is, are students graduating from high school prepared for the reading demands of the postsecondary world? Another way of phrasing this concern is by asking if students are acquiring the reading skills necessary to enroll and succeed at a postsecondary institution without the need for remediation.

Because the Lexile Framework measures both reader and text it is a useful tool for measuring the complexity level of postsecondary materials, whether workplace materials, citizenship materials (e.g., newspapers, tax forms, voting instructions), or university-level textbooks. But the Lexile scale can also be used to measure the reading level of a student and thus indicate if a student is, in fact, reading at a postsecondary level and is adequately prepared for college and career.

The shift toward emphasizing college and career readiness has become all the more urgent because it has become increasingly apparent that many high school students are graduating high school woefully unprepared for the rigors of the postsecondary world. Over the last hundred years (1919 – present) the text complexity of secondary textbooks has been declining (Chall, 1977; Hayes, 1996). In one study, the median eleventh- and twelfth-grade high school text measure was 1130L; by contrast, freshman and sophomore core curriculum, university level textbooks had a median Lexile measure of 1395L. Consequently, the gap between high school and university level reading material may be as large as 265L (Williamson, 2008). This sizable gap between high school texts and university texts is what has led many education leaders to worry that many U.S. students are no longer graduating prepared for the challenges they will face at the community college or university (Williamson, 2004). And because many students arrive at universities and community colleges illprepared for the reading demands they encounter, they often must complete reading remediation courses. As of 2012, for example, the national average of percentage of freshmen that enrolled in at least one remedial course at the community college level was 52%. For four-year institutions, the remediation rate was 20% (Complete College America, 2012). This lack of preparedness is what has led many educational leaders to posit a readiness gap; and education reformers have set about to propose ways in which this gap may be mitigated.

#### Preparing Students for College and Career

One of the primary ways to help prepare students for the rigors of the postsecondary world is to increase the level of text complexity with which students contend during their secondary years. The authors of the Common Core State Standards, for example, have argued that far too few students are being exposed to increasingly complex levels of text, and that students should be exposed to higher levels of complex texts as a way to prepare them for success in college and career (National Governors Association for Best Practices (NGA Center) & the Council of Chief State School Officers (CCSSO), 2010). Lexile measures are an excellent way to measure a reader's level and to match that reader with the appropriate level of challenging text. Additionally, because Lexile measures can be used to measure the complexity of a text, Lexile measures offer a way to select higher levels of text in order to provide readers adequate challenge and exposure to complex text. SRA FLEX Literacy also provides a compelling application of the Lexile Framework in that it measures a reader's current reading level and then matches that reader to the appropriate level of challenging, Lexile-leveled content.

The authors of the Common Core have argued for a staircase of increasing text complexity with each passing grade (National Governors Association for Best Practices (NGA Center) & the Council of Chief State School Officers (CCSSO), 2010; Nelson, 2011). This "staircase" is not based on a particular normative group; rather the staircase is aspirational in nature, reflecting the types of materials one should be reading in order to achieve college and career readiness by the end of high school.

Grade Range	Old Lexile Range	College / Career Lexile Range
K–1	N/A	N/A
2–3	450L-725L	420L-820L
4–5	645L-845L	740L–1010L
6–8	860L-1010L	925L-1185L
9-10	960L–1115L	1050L - 1335L
11–CCR	1070L–1220L	1185L–1385L

It's important to note that even for states that have not adopted the Common Core, this aspirational table offers a useful guide for setting academic goals and monitoring reading growth and progress.

Another way to help reduce the readiness gap and prepare students for college and career is to expose students to more informational text (nonfiction) at an earlier age. Duke (2000) found that U.S. students are exposed to much less informational text than their international peers. In a typical first grade classroom, for example, Duke found that less than 10% of the reading material in a first-grade classroom was informational in nature. She also found that less than 4 minutes per day was spent on reading informational text (Duke, 2000). Many publishers have moved quickly to provide more informational texts. The tremendous wealth of age-appropriate and well-targeted informational text now available across a wide range of topics should provide ample resources to support an instructional shift to expose U.S. students to more informational text.

The authors of the Common Core have also recognized the disparity between fiction reading and informational text and have taken a cue from previous recommendations from NAEP, arguing that students should be engaging with informational text at an earlier age and in much higher volume than they have in years past (National Assessment Governing Board (NAGB), 2008). There are currently many reading programs that provide students valuable exposure to higher levels of informational text, including *SRA FLEX Literacy* which matches students to age-appropriate informational text across a wide range of topics based on the reader's Lexile measure. The table below illustrates the proper ratio of informational to literary text by grade:

Grade	Literary	Informational
4	50%	50%
8	45%	55%
12	30%	70%

A third way to prepare students for the rigor of college and career is to increase instructional time and the amount of time spent reading. This can take a variety of forms, but one promising way is for schools and districts to undertake efforts to reduce the amount of learning loss that occurs each summer when school is not in session. Educators have been aware of the phenomenon of summer learning loss for at least thirty years, but more recent research tying summer learning loss to the ongoing and persistent achievement gap has brought the issue to the forefront of educational research and to the attention of mainstream media (Allington & McGill-Franzen, 2013). Many schools and districts have responded by facilitating summer reading programs aimed at keeping students reading over the summer months.

Efforts to combat summer learning loss can take many forms and often involve joint efforts between school libraries, educators, parents, public libraries, publishers, and even retail book sellers.

## The Role of the Lexile Framework in SRA FLEX Literacy

Educational publishers are doing their part to help ensure college and career readiness. Educational products, like *SRA FLEX Literacy*, are able to utilize technology as a way to ensure that students do not just read more, but read more targeted text. By targeting students at their individual reading level, *SRA FLEX Literacy* goes beyond differentiation and is able to individualize education to the unique needs of each student.

Developed for students in Grades 3 through 8, *SRA FLEX Literacy* integrates an interim reading assessment system with an instructional program (MetaMetrics, Inc., 2012). All of the components of *SRA FLEX Literacy* are integrated through a comprehensive teacher management and assessment system, allowing teachers and administrators to place students, monitor student progress, and manage the learning experience for students.

The SRA FLEX Literacy assessment system employs the Lexile Framework for Reading to ensure that students are matched with reading materials at an appropriate level that provides challenge, but avoids frustration. All measures (of text complexity and student ability) within SRA FLEX Literacy are calculated using the Lexile Analyzer and the Lexile scale developed by MetaMetrics. At the beginning of the year, students take a placement test of reading ability. This placement test is based on the student's grade level and helps guide the initial selection of instructional materials and readings. As students move through SRA FLEX Literacy, they take additional short tests based on their current Lexile measures. Tests contain both fiction and nonfiction reading passages with associated test items. The scores on these tests are used to update each student's Lexile measure and to monitor growth in student reading ability throughout the year. This allows for real-time progress monitoring of student reading growth and provides a way for educators to provide instructional support to students.

McGraw-Hill developed *SRA FLEX Literacy* to address the need for students to read often and read material at the right level of complexity. The assessment components of *SRA FLEX Literacy* help to personalize the reading experience for students and provide valid and reliable indicators of student reading ability. With up-to-date information about their students' reading ability, teachers can better prepare students to be successful readers. *SRA FLEX Literacy* also provides educators with tools with which to monitor student reading growth. As a result, educators can better prepare students for success with the Common Core State Standards (CCSS). And even states that have not adopted the Common Core can use *SRA FLEX Literacy* to monitor reading progress and growth.

#### **Types of Assessments**

Upon entry into the program, a new user will be administered a placement test at the appropriate grade level and will receive a Lexile measure based on the placement test results; text selections for the student can then be targeted based on the student's Lexile measure. Three times a year, the student will be administered progress monitoring tests also targeted to his or her Lexile measure. As students progress through the program, they will be administered weekly, short, embedded cloze passage tests integrated into the instructional program. Performance on these embedded cloze tests will help guide subsequent reading selections. Selection of future tests will also be adjusted based on the student's improvement in reading ability.

There are a total of six placement test forms, one for each grade (3-8). Each placement test consists of 35 items. The tests are untimed, but each is designed to take about 30 to 35 minutes for a student to complete. Items on the placement tests are composed of both literary (fiction) and informational (nonfiction) passages, with the percentage of informational passages increasing as the grade level increases. The proportion of literary and informational passages is consistent with the National Assessment of Educational Progress, which also informs recommendations of the Common Core State Standards for English Language Arts and Literacy in the Sciences, Social Studies and Technical Subjects (ELACCSS).

The SRA FLEX Literacy progress monitoring tests are designed to assess students' reading ability several times during the year, to track growth and adjust text targets for students. When the student is administered a SRA FLEX Literacy  $^{\text{TM}}$  progress monitoring test, the student's prior information (i.e., previous test results) is incorporated into the Lexile scoring algorithm and a new Lexile measure and an associated estimate of uncertainty for the student is produced. These data are entered into the SRA FLEX Literacy data system to allow the program to continue to offer targeted text selections to the student. SRA FLEX Literacy includes three sets of progress monitoring forms to allow flexible administration throughout the year.

The two main purposes of *SRA FLEX Literacy* assessments are to initially measure student reading comprehension so reading materials can be appropriately targeted and to iteratively measure growth in reading comprehension throughout the school year. By monitoring student reading growth throughout the year, educators are able to offer instructional support to students. Additionally, by utilizing *SRA FLEX Literacy* educators are able to engage students in targeted reading as well as expose them to higher levels of informational text. Doing so, allows educators to help prepare students for the higher level reading they will face throughout college and career.

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