

# Bending the Reading Growth Trajectory:

## Instructional Strategies to Promote Reading Skills and Close the Readiness Gap

by MetaMetrics President and Co-founder Malbert Smith III, Ph.D.

An *Education Week* article summarizes the postsecondary readiness gap in unequivocal terms: “High school completion does not equal college readiness” (Gewertz, 2011). In particular, research findings that quantify how well students need to read in order to succeed in postsecondary pursuits have finally dispelled the false assumption that graduating high school is sufficient to prepare students for the challenges of college and careers. In his investigation of postsecondary reading demands, MetaMetrics Research Scientist Gary L. Williamson, Ph.D. discovered a substantial leap in reading expectations and text complexity from high school to postsecondary domains—a gap large enough to help account for high remediation rates and disheartening graduation statistics (Williamson, 2008).

These new understandings serve as the cornerstone of the revised reading standards articulated in The Common Core State Standards, an unprecedented set of national guidelines intended to raise educational standards and ensure postsecondary readiness. Appendix A of the Standards—which have already been adopted by nearly all states—emphasizes that, by the time they graduate high school, “students must be able to read and comprehend independently and proficiently the kinds of complex texts commonly found in college and careers” while also noting “a serious gap between many high school seniors’ reading ability and the reading requirements they will face after graduation” (NGA Center and CCSSO, 2010). Ambitious new reading goals reflecting the importance of text complexity are set forth in Appendix A for each grade (Figure 1).

Now that the need for revised reading growth patterns has been acknowledged as a top national priority—and newly adopted standards have raised the bar for reading achievement—the great challenge for policy makers and educators in the coming decade is clear: we must “stretch” current reading growth curves and elevate expectations to better reflect and align with postsecondary demands.

**Figure 1. Text Complexity Grade Bands and Associated Lexile® Ranges**

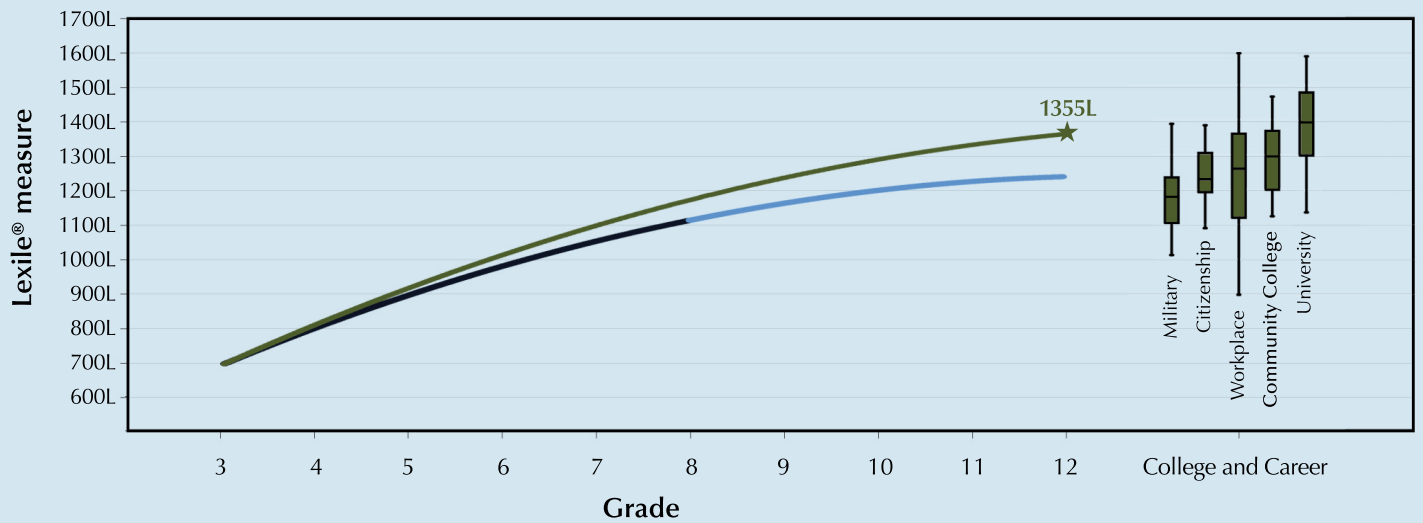
Text Complexity Grade Bands	Lexile Ranges Aligned to CCR Expectations
K-1	N/A
2-3	450L-790L
4-5	770L-980L
6-8	955L-1155L
9-10	1080L-1305L
11-CCR	1215L-1355L

But *how* can we bring these new growth patterns into reality? What instructional strategies can educators employ to guide all students onto higher reading growth trajectories?

In order to evaluate and implement effective instructional strategies to support reading growth, it helps to understand the nature and characteristics of growth curves as they have existed historically. Extensive longitudinal research by Williamson over a period of fifteen years describes normative growth curves for five cohorts of students in North Carolina (Williamson, Thompson & Baker, 2006). In Figure 2, the solid blue line represents the average growth curve for a group of these students from grades 3-8. It is apparent that the impressive reading gains and high velocity of growth students demonstrate by the end of third grade are replaced by increasingly slower growth rates in the middle school years. If students remain on this trajectory, they can be expected to experience further deceleration through high school (as shown by the light blue line) and reach an average reading ability of 1275L at the end of twelfth grade. This level lies between the median complexity of workplace and community college texts, but falls short of the 1355L required for college and career readiness. (NGA Center and CCSSO, 2010).

For more information on Lexile measures and the Common Core State Standards, visit [www.Lexile.com](http://www.Lexile.com).

Figure 2. Bending the Reading Growth Trajectory



This characteristic pattern of growth—strong in the early years and decelerating over time—is key to understanding which instructional responses will be most effective in helping students follow a more ambitious path: one that will prepare them for the higher text demands required for college and career readiness. Raising average reading scores in the early grades has long been a successful focus of educational research and reform. Many states, for example, have capitalized on the fast growth exhibited by young children by adopting early intervention initiatives. Strategies to raise early reading scores even further might include reviewing the K-3 curriculum to ensure that instruction is properly aligned with curriculum and assessment; and using a formative assessment system, which helps educators check for understanding and deliver instruction.

A greater challenge for reformers has been increasing the velocity or speed of student growth in reading. To accelerate growth, educators must first review and adjust the scope, sequence and pace of instruction: i.e., the breadth and depth of content to be covered, the order in which content is presented, and the speed at which material should be introduced.

Reading growth can also be addressed by exposing students to more complex text—especially in the middle and high school years—so that they have increased opportunities to stretch their skills. Unfortunately, as Appendix A of the Common Core Standards laments, “K-12 texts have actually trended downward in difficulty” and have become “less

demanding” over the past fifty years (Chall, Conrad, & Harris, 1977; Hayes, Wolfer, & Wolfe, 1996). Intended to remove barriers to content with more accessible texts, this trend has had the unintended effect of hampering students’ ability to tackle more challenging texts as they progress toward graduation. It should be noted that exposing secondary students to more demanding text no longer has to result in discomfort, strain or frustration. With measurement tools like Lexile® measures that help students determine their “just-right” reading range to enhance reading growth and lead to readiness, students can challenge themselves with success and a resulting sense of accomplishment.

Educators can also use benchmark assessments—tests given at prescribed intervals throughout the school year—to supplement end-of-year tests (which are more “summative” in nature). Benchmark assessments, like those administered by many districts to yield students’ Lexile measures, are intended to measure progress along the way. They not only provide data on how to adjust instruction, but are also useful for providing information for district decision-making and evaluating student growth trajectories toward the textual demands of college and careers.

Perhaps most importantly, deliberate reading practice by students has shown promise in increasing the velocity of reading growth. Research suggests that the move from novice to expert in almost any domain (whether musical, athletic or intellectual) involves an intricate process in which practice

must be targeted, intensive, distributed, self-directed, and be followed by feedback on one's performance (Ericsson, 2006; Glaser, 1996; Kellogg, 2006; Shea & Paull, 1996; Wagner & Stanovich, 1996). Utilizing a metric, like the Lexile measure, allows educators to match students to the appropriate level of challenging text and facilitates the sort of deliberate and targeted practice that promotes expertise.

Furthermore, rapid advances in technology and the emergence of personalized learning platforms have allowed educators to take individualized learning to scale, and facilitate personalized instruction by targeting learners at their current level to promote reading growth. These innovative web-based programs provide students with the targeted, intensive, self-directed practice and immediate feedback that are proven to support skill development.

As speed of reading growth is supported, the deceleration or slowing of growth rates over time must also be addressed. How can deceleration be mitigated so that the pace of growth is better maintained over time and robust throughout the later grades? For one thing, better vertical articulation of curriculum—supported by vertical systems of measurement—can eliminate gaps or unnecessary repetition in the learning sequence. Along the same lines, educators must rethink the outdated and potentially harmful belief that students *learn to read* until a certain point in their schooling and then switch to a model of *reading to learn*. This faulty philosophy—which underlies a diminished focus on reading skills in the later grades—results in increasingly less measurement, monitoring and explicit instruction in reading comprehension. A continued emphasis on *learning to read* even as students begin *reading to learn* is key to stemming deceleration in reading growth. Why? Because comprehension remains a challenge and skills must continually be honed as students confront more difficult text.

Lastly, and perhaps most importantly, mitigating “summer loss”—the loss of skills experienced by most students over the summer months, especially in reading—is another very promising way to slow deceleration and maintain a higher pace of reading growth. The reading loss that occurs over the summer months has been well-documented and adversely affects students primarily from low-income households (Cooper, 1996). Research by James Sangil Kim, Ed.D., assistant professor of education at Harvard University, has shown that

students who select books of interest to them and read steadily at appropriate levels over the summer months exhibit gains in reading ability (Kim, 2006). This kind of beneficial summer reading can be supported in numerous ways, including “Find a Book,” a free, online search utility that allows students to build customized reading lists based on Lexile level and personal interests.

In order to ensure students graduate prepared for the reading demands of college and careers, we must bend current reading growth curves so that students attain higher skills by the end of high school. Since the effects of velocity and deceleration of growth accumulate over time, small but consistent modifications in either or both can have tremendous impact on reading achievement over the course of several years. The green curve in Figure 2—which represents a more ambitious, “aspirational” growth trajectory—makes clear that if students had a growth rate only 5L higher at the end of third grade, and could reduce their deceleration by less than 1L per year, their reading skills would reach the median text demand for college and career readiness.

By taking a longitudinal growth model perspective as Figure 2 illustrates, we can rationalize the reading growth demands over the lifespan of learners. This perspective is helpful because:

1. Reading skills development is a shared responsibility across the K-12 landscape, as opposed to only in the early elementary years.
2. Policy makers, educators, parents and students have consistent, objective metrics to monitor progress and forecast growth.
3. It demonstrates that even modest gains sustained over time can have a huge long-term impact and lessens the need for “Herculean” efforts as students get closer to graduation.

Research has already pointed us in the direction of the aforementioned instructional strategies, all of which can address the velocity and deceleration of reading growth in order to enhance comprehension skills and support students on higher trajectories. As idealized growth trajectories are envisioned and adopted in response to the Common Core Standards—and states continue to collect more and better longitudinal data—we will be even better positioned to think strategically about how we can modify reading instruction.

Never has there been a better time to adopt a long-term perspective on reading growth in order to enhance student achievement and ensure college- and career-readiness.

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**ABOUT THE AUTHOR:** Malbert Smith III, Ph.D., is president of MetaMetrics®, an educational measurement and research organization. Together with co-founder and CEO A. Jackson Stenner, Ph.D., Dr. Smith created The Lexile® Framework for Reading; El Sistema Lexile para Leer; The Lexile Framework for Writing; and The Quantile® Framework for Mathematics. Dr. Smith strives to make educational measurement actionable in the classroom and at home. His vision of common metrics for reading, writing and mathematics opens the way for differentiated instruction. In each state—and increasingly abroad—educators use Lexile and Quantile measures to blend instruction and assessment in whole-class and intervention settings. Concerned with the relationship between early literacy and college- and career-readiness, Dr. Smith

led research to build a continuum of text complexity that places academic and life goals on the Lexile scale. He and Dr. Stenner were members of the team that contributed to the Common Core State Standards. They are also senior investigators on a National Center for Education Statistics research study to examine NAEP benchmark scores in relationship to college- and career-readiness. Dr. Smith serves on the UNC School of Education Foundation Board, the advisory board of Capstone Digital, and is a member of the advisory board for EdSteps, a joint project of the Council of Chief State School Officers and The Bill and Melinda Gates Foundation. He and Dr. Stenner are leading a three-year grant from The Gates Foundation on the efficacy of personalized learning platforms. Dr. Smith is a member of The American Association for the Advancement of Science, The American Educational Research Association and The National Council on Measurement in Education. He has taught graduate seminars in educational research and test development and design at Duke University and the University of North Carolina at Chapel Hill, from which he received the Distinguished Alumni Award. Dr. Smith frequently speaks at various events on educational research and measurement.

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