Fulfilling the Promise of the Common Core:

Innovative Solutions to Eliminate the Readiness Gap in the "New Normal"

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

At no time in the history of American K-12 education have the challenges and consequences of our actions been so great. As students across the nation settle into a new school year, administrators and educators are simultaneously attempting to implement the new Common Core State Standards in an economic climate plagued by budget shortfalls—an environment many economists have dubbed the "New Normal." While no consensus exists on whether our economy will double-dip or will just be slow to recover, what is certain is that educators will need to do more with less. How can educators and students realize the promise and potential of the Common Core in the "New Normal" when projected federal and state funding cliffs are quickly becoming reality?

Education Secretary Arne Duncan has stated that the Holy Grail of education is to ensure all high school students are adequately prepared to meet the challenges of postsecondary endeavors; that they are "college- and career-ready." To this end, both *Race to the Top* and the Common Core criteria advocate standards that build toward and ensure readiness. But, the reality is that high school completion does not equal college readiness, and an alarming number of students graduate unprepared for the academic and professional challenges that await them.

What may be equally alarming is that this lack of readiness is not a new phenomenon. Nearly 100 years ago, researchers Wilson and Hoke (1921) wrote:

> *The college instructor blames the high school teacher, the high school teacher complains of the grade teacher, each grade teacher above first grade finds fault with the poor work of the teacher in the grade below, and the first grade teacher in turn is chagrined at the shortcomings of the home training. Must this go on indefinitely? Whose opinion shall prevail? Is it not possible to get away from personal opinion to an agreed-upon consensus of opinion? May we not replace the constantly conflicting subjective standards with definitely defined objective standards?*

The lack of defined standards has been an inherent impediment to student readiness. With near nationwide adoption and, ultimately, implementation of the Common Core, there is great hope that this limitation of our education system will finally be addressed.

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

As noted in past policy briefs, closing the gap means bending the reading growth trajectory toward college and career readiness for all students. According to Appendix A of the Common Core State Standards for English Language Arts, this starts by engaging students in increasingly complex texts as they progress from grade to grade (see Figure 1) (NGA Center and CCSSO, 2010). With objective reading metrics and clear standards to help chart this journey, we can now take a more longitudinal perspective that allows reading growth to be rationalized over each student's educational lifespan. This perspective is helpful because:

1. Reading growth is a shared responsibility across the K-12 continuum, as opposed to only in the elementary years.

For more information on Lexile measures and the Common Core State Standards, visit **www.Lexile.com**.

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2. Policy makers, educators and families 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 lessen the need for "Herculean" efforts as students get closer to graduation.

With nearly all states having adopted the Common Core, national attention has shifted to the more difficult task of implementing these higher standards. This begins, in part, with allocating more instructional time. If funding issues were nonexistent, school districts would simply hire more educators to reduce teacher-to-student ratios and possibly add much-needed days to the school calendar. Unfortunately, our legacy public education system has maintained a conventional calendar of 180 days. And while this calendar made sense in an agrarian society more than 100 years ago, it is no longer viable.

The "New Normal" requires us to find innovative solutions to eliminate the readiness gap. There are two promising, cost-effective strategies that can help us achieve the Common Core within today's financial and time parameters: personalized learning platforms and summer reading. Both approaches support "blended learning," which Michael Horn defines as: "any time a student learns at least in part at a supervised brick-and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path, and/or pace" (Horn, 2011). Personal learning tools and metrics already in use—and others being developed and tested—promise to revolutionize literacy learning and facilitate the necessary upward bending of reading growth trajectories by supporting key instructional strategies in and outside of the classroom.

Lexile® measures, for example, evaluate reading ability and text complexity on the same developmental scale, enabling the targeting of reader with text essential for growth. As depicted in Figure 1, Appendix A of the Common Core State Standards for English Language Arts offers recommended Lexile bands by grade levels that can be incorporated into instruction designed to prepare students for the reading demands of college and careers (NGA Center and CCSSO, 2010). Lexile measures are available from nearly 50 popular reading tests and programs, including more than twenty state assessments and the most commonly used norm-referenced and benchmark assessments.

Personalizing Learning with Technology

The idea of personalized learning systems has existed since the 1950s, but implementations have never fully realized the ideals of their creators. While pioneers such as B.F. Skinner, Robert Gagne and Fred Keller defined the original design principles, their ideas were only crudely implemented. Most early efforts toward personalization merely allowed students to move through a course of study at their own pace by following tightly scripted pre-programmed material. Today, these limitations no longer apply. With improved technology, better understanding of instructional principles, and the advancement of psychometric theory and tools, there is capacity to realize the promise of what these early learning scientists initially conceived.

Metrics and research tools have already transformed the way educators think about reading growth and the benefits of matching readers with texts. The Lexile Frameworks for Reading and Writing, for example, are currently being used to power more integrated, interactive utilities: technology-based personalized learning platforms. These innovative learning systems—which harness the power of technology and recognize the value of "personalized learning"—are already engaging and empowering students and are being embraced by more and more teachers and administrators. Organizations, including Capstone Digital and Achieve3000, have utilized The Lexile Framework for Reading to offer programs and products that continue to spur the personalized learning movement.

Another system that shows great promise is MetaMetrics®' Learning Oasis™. This personalized learning platform uses the Lexile Frameworks to differentiate reading and writing practice and support overall literacy growth. The reading component of Learning Oasis immerses developing readers in text of high interest or content relevance that is targeted to each reader's ability. Articles from periodicals and newspapers are classified by Lexile measure and category. During their engagement with articles in Learning Oasis, students are periodically presented with auto-generated "cloze" items: passages in which selected words have been deleted. Students are prompted to fill in the missing words and the system uses these answers to generate an updated Lexile measure. In this way, without students experiencing the pressure of being "tested," growth is consistently measured and monitored. Learning Oasis automatically offers selections

of appropriate and increasing complexity based on continuing growth.

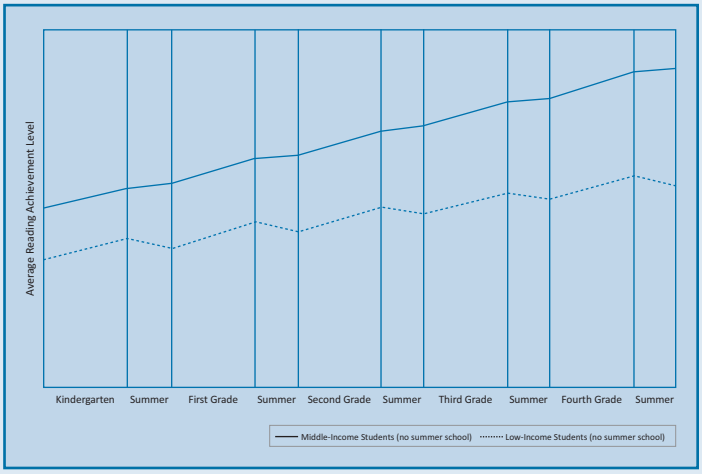
Computer-based personalized learning platforms promise to meet the needs of both students and teachers. By elegantly blending assessment with daily classroom instruction—and customizing the learning experience for each student—personalized learning platforms take differentiated instruction to a new level and will likely revolutionize and redefine the way we think about learning and assessment. While educational standards may be laudable, there is no "standard" student. Each has a unique profile of aptitudes, weaknesses, motivations, needs and interests, which is why many of the most influential leaders in education believe that the best way to ensure student success and achievement is through personalizing the learning process.

Extending Learning Over Summer

No matter what type of academic calendar a state or school district uses, U.S. students attend school every year for an average of 180 days. During that time, most students achieve some level of growth in their reading ability and mathematics achievement. Then summer break starts, the formal learning process ends, and, instead of progressing, students start to slip in their abilities. Research shows that all students experience some level of learning loss—commonly referred to as summer slide—when they do not engage in educational activities during the summer. While the slide in mathematics is universal, the summer reading slide disproportionally affects low-income students—those who generally reside in low-literacy environments where daily reading is not encouraged or modeled and appropriate reading materials are not available. Research indicates that two-thirds of the reading achievement gap can be explained by the cumulative impact of these lost summers (Alexander, Entwisle & Olson, 2007). Figure 2 illustrates how summer loss significantly affects low-income students (adapted from McLaughlin & Brady, 2006).

Based, in part, on the research of Harvard University's James Kim, MetaMetrics developed a free book search utility, called "Find a Book," that allows students, teachers and parents to build personalized reading lists based on interests and Lexile level, and to find their reading selections at the public library. Kim's research demonstrated that if children read high-interest, ability-appropriate books during the summer their reading skills can grow as much as their peers who attended summer school (Kim, 2005). With more than twenty states reporting Lexile measures from their year-end tests, many of these states have now bypassed the status quo of simply encouraging students to read over the summer and have opted instead to promote "Find a Book" for more personalized reading experiences. Other freely available tools for creating personalized reading lists include Barnes & Noble's Lexile Reading Level Wizard and Scholastic's Book Wizard.

Figure 2. Summary of Reading Achievement Trajectories



The Potential for Revolutionary Change

According to the National Education Technology Plan (NETP), the use of technology in schools does not sufficiently reflect or build on the ways students use digital tools in their lives outside school or how technology is used in the professional world. This represents a "gap" as significant and detrimental as the postsecondary readiness gap—one that must be bridged with "revolutionary transformation rather than evolutionary tinkering" (U.S. Department of Education, NETP, 2010, p. 3). Supporting a similarly revolutionary approach, Susan McLester states in *District Administration* that "personalized learning represents a sweeping, systemic change to American education" (McLester, 2011, p. 45).

Technology-based learning platforms can serve as the cornerstone of this revolutionary change. By harnessing the power of technology, they have the potential to personalize the learning process; support teachers in enacting best teaching strategies; and help students meet ambitious and rigorous standards.

Perhaps, most importantly, by offering "anytime, anywhere" access, personalized learning platforms and customized

applications can change our ideas about where and when learning should take place, and thereby answer the call of the NETP to embrace online learning as a way to "extend the learning day, week or year." The Plan's proposed model for an infrastructure for learning is "always on, available to students, educators and administrators regardless of their location or the time of day" and "enables seamless integration of in- and out-of-school learning" (U.S. Department of Education, NETP, 2010, p. xiii).

The great hope—and promise—is that technology can supplement teacher-directed instruction in such a way that what is learned from teachers is reinforced by technology; that students will finally enjoy ownership and responsibility for their own learning; and that teachers will be freed to do what they do best: guide, inspire and mentor their students.

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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.

METAMETRICS® POLICY BRIEFS: MetaMetrics is focused on improving education for learners of all ages. For over twenty years, our work has been increasingly recognized for its distinct value in differentiating instruction and personalizing learning. Our research on postsecondary reading demands, for example, informed the Common Core State Standards for college- and career-readiness. In addition to the white papers and position papers we publish throughout the year, our policy briefs will encompass our research on a variety of educational issues, such as closing the achievement gap, next-generation assessments, and college and career readiness. The policy briefs will explore potential ways to address these critical issues by focusing on education as the foundation of student success and the stepping stone to social and economic growth in our country.

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