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Evidence and Efficacy



Houghton Mifflin Harcourt (HMH) is

committed to developing innovative educational programs that are grounded in evidence and efficacy. We collaborate with school districts and third-party research organizations to conduct research that provides information to help improve educational outcomes for students, teachers, and leaders at the classroom, school, and district levels. We believe strongly in a mixed-methods approach to our research, an approach that provides meaningful and contextualized information and results.

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AUTHOR LETTER

Dear Educators,

Now more than ever, we have the tools to improve the lives of students through reading instruction. We have years of research demonstrating effective practices for teaching reading comprehension and the experience to transform that research into instruction. The era of more rigorous standards has brought the relationship between research and instructional practice into sharp focus. Educators are able to monitor the progress of their students through technology, assessments, and their own observations and adjust their instruction accordingly.



Dr. Ted Hasselbring

Highly effective blended learning solutions, such as *READ 180*, are having significantly positive impacts on the achievement of struggling readers. There has been much progress in enhancing the technology base for the newest edition, *READ 180* Universal, such as refining the adaptivity of the learner profile and employing speech recognition. Even more importantly, there has been a realization of the critical need for supporting educators in using the new technology as effectively as possible.

Most important, however, is the ability of technology to let teachers engage and motivate students to be lifelong learners. I have been fortunate to partner with Houghton Mifflin Harcourt (HMH) in continuously improving *READ 180* after conducting the formative research and developing the initial prototype. Most recently, I have been involved in the development of the new *READ 180*—now called *READ 180* Universal—ensuring that it first and foremost places the teacher in a central role in the program's implementation, and then ensuring that it includes the most updated research and best practices in the field on how to effectively use technology to support instruction. With the dual benefit of teacher-facilitated instruction and the Student Application (Student App), *READ 180* Universal is designed to provide personalized and individualized instruction that meets each student's unique ability level, interests, and needs.

Well-designed blended learning solutions offer many positive benefits for our struggling students and allow teachers to do what they do best: teach with confidence and purpose. For example, some aspects of blended learning solutions that support teachers and students include technology that is:

1. Adaptive

2. Effective at facilitating practice leading to mastery

3. Available anytime and anywhere

4. Effective at gathering and processing data

5. Motivating

As evidence of what makes blended learning solutions most efficacious has increased, so has awareness of the teacher's role in making sure that the technology is being used appropriately. While new and adaptive technologies make it possible for all students, especially those who are struggling, to benefit from good instruction, technology is not magic. After all, students will not remember the computer that taught them to read; they will remember the teacher who changed their lives. The new *READ 180* Universal was developed to support these life-changing teachers as they serve their students.

I firmly believe that *READ 180* Universal will provide the support that all students need to thrive not only in an educational setting, but in life beyond school. This is most critical for students struggling with language, cognitive, and social-emotional needs. With the assistance of adaptive technology, quality instructional materials, and effective professional learning support for teachers, a much-needed lifeline can be provided to all students.

Sincerely,

Le M

Dr. Ted Hasselbring

READ 180 Program Author

Professor of Special Education

Peabody College of Education

Vanderbilt University

INTRODUCTION

Successfully reading a text for deep comprehension entails extracting and constructing meaning through an interaction between the text, task, and reader (Snow, 2002). Reading comprehension is an extremely complex task that encompasses several constructs, including language development, word recognition, text fluency, knowledge building, vocabulary, affective skills, and writing. It requires mastery and automaticity of these cognitive processes. As such, struggling readers typically benefit from identification of their individual strengths and weaknesses and intervention in one or more of these areas as needed. The editorial team at Houghton Mifflin Harcourt (HMH) has carefully considered the complexity of reading comprehension in the design and development of READ 180 Universal.

The goal of *READ 180* Universal is to translate this theory into practice through a program that identifies and addresses the needs of each individual student. In designing *READ 180* Universal, we have considered the interaction of these processes and subprocesses and developed a program that includes instruction, practice, assessment, and professional learning in each of them. As such, *READ 180* Universal will allow every student to master and automatize each of the subprocesses required for fluent reading comprehension and reach the goal of comprehending and appreciating complex texts.

READ 180 Universal was developed with the era of rigorous standards foremost in our minds, especially with the intent to support students at risk for academic challenges. We firmly believe that all students can learn to read complex texts, and that the responsibility of learners' literacy and language development is shared between the teacher and the student within the school, as well as with parents and community leaders outside the school. As such, we seek to provide teachers and parents with the tools necessary to be effective in building what Linda Darling-Hammond calls "shared responsibility" (Darling-Hammond, 2004). With READ 180 Universal, we intend to provide all teachers, students, and families with well-designed, comprehensive, and individualized learning opportunities that motivate students to reach their full potential.

Following the aspirations of heightened state standards, *READ 180* Universal is designed to provide an exceptional educational experience for students by focusing on the importance of teachers, families, and the learning community in providing educational opportunities that meet the needs of each individual student. As such *READ 180* Universal seeks to do the following:

- Provide rigorous instructional resources that meet the diverse language, cognitive, social, and emotional needs of students, as well as provide learning opportunities that are motivating for students
- Carefully design and present instructional content that ensures students' engagement and sets them on a path to become lifelong learners
- Encourage growth mindset and self-efficacy, such that
 teachers and students view learning as a fluid process that
 continually grows with effort and can be controlled and regulated
 by planning and organizing, setting and meeting goals, problem
 solving, regulating emotions, and monitoring behavior

- Develop neural networks in disparate areas of the brain through instruction that allows students to master and integrate the myriad skills necessary for successful reading comprehension
- Use student data effectively to drive and differentiate instruction, resulting in learning experiences that are tailored to individual students' needs
- Personalize and individualize instruction by using adaptive technology that empowers students to work independently at their own levels and pace
- Prepare students and teachers for assessment of and for learning by informing appropriate instruction, establishing priorities for professional learning, and providing tools for accountability purposes
- Support extended learning beyond the classroom by encouraging family engagement that can be done in the home with parents and siblings
- Create an educative curriculum that inspires teachers to exchange best practices in professional learning communities to effectively teach students to the levels of depth required by rigorous standards

At its core, *READ 180* Universal aims to provide the **learning opportunities** that each unique student deserves:

- To encourage meaning making through critical thinking and the ability to view and articulate important issues from multiple perspectives
- To develop the content knowledge and foundational literacy skills one needs to be successful in school, the workplace, and society
- To support effective and expressive language development
- To spark the imagination with new perspectives that provide a profound understanding of self and others
- To realize his or her potential academically and socially

In providing these opportunities, *READ 180* Universal allows teachers to reach the goal of accelerating all students to grade-level independence.

"[E]nough is already known about adolescent literacy—both the nature of the problems of struggling readers and the types of approaches to address these needs—in order to act immediately on a broad scale.1"

¹ This call to action was originally published in *Reading Next—A Vision for Action and Research in Middle and High School Literacy: A Report to Carnegie Corporation of New York* (Biancarosa & Snow, 2004, p. 10) and more recently reproduced in *The Next Chapter: Supporting Literacy Within ESEA* (Haynes, 2015, p. 8).

THE EVIDENCE BASE AND EFFICACY OF READ 180 UNIVERSAL

READ 180 Universal is a new blended learning solution that incorporates up-to-date research and practice with a deep commitment to using evidence and efficacy to inform and inspire. The initial version of *READ 180* was developed in 1999 and soon produced success stories in schools across the country. With the changing educational landscape, new versions of the program have been created to accommodate the needs of students from various backgrounds and reflect the growing body of reading research and technology innovation.

In 2004, READ 180 Enterprise Edition was developed in continued collaboration with Dr. Ted Hasselbring, who was joined by Dr. Kevin Feldman, Director of Reading and Early Intervention, Sonoma County Office of Education, and Dr. Kate Kinsella, adjunct faculty member, College of Education at San Francisco State University. The Enterprise Edition added structured engagement routines introduced in the *rBook* that ensure full participation by all learners, provided additional second-language support to English learners, and introduced SAM platform in order for teachers to better keep track of student data and progress.

In 2008, System 44 was launched as a Tier 3 solution for students who were struggling the most. The program is designed to provide students with systematic instruction on the foundational literacy skills necessary to progress toward reading comprehension.

In 2011, READ 180 Next Generation was launched to provide teachers with a simpler, easier-to-use instructional system with a more directed path for data-driven differentiated instruction, as well as to increase writing instruction and to give students more ownership of their learning.

STUDENTS IMPACTED DAILY

1,000,000









THIRD PARTY VALIDATION



Studies Meet **Evidence Standards**



Studies Are Peer Reviewed



Years of Endorsement Along these lines, *READ 180* Universal was developed to provide students with even more personalized, individualized, and engaging instruction. This newest version targets what we know about the brain and how children learn in many different ways—from executive functioning to specific cognitive skills to social and emotional intelligence—and provides them with the language supports necessary for successful learning.

Each new version of *READ 180* has been built upon a foundation of careful, thorough research in consultation with renowned educational researchers as well as educator experiences and best practices. As the results of 40 research studies published in our latest *READ 180* compendium show, from 2000 to 2015, the program has been successful with students of diverse backgrounds, including English learners, students with disabilities, economically disadvantaged students, and students of various ethnicities in California and across the nation.

Given the current federal push for evidence of return on investment in education spending, a study conducted by Whiteboard Advisors (2012) in Napa Valley Unified School District found that, in addition to *READ 180* students making significant gains on the state assessment, the district tracked lower referral rates into special education, as well as lower numbers of expulsions and suspensions since implementing the program.

Additional studies have found *READ 180* to be effective for English learners. In a bronze level study¹ conducted in Deer Valley Unified School District, Arizona, fourth- through eighth-grade English learners made significant gains on the state reading test and HMH *Reading Inventory* after using *READ 180* for a year (2012). Likewise, in Lawrence Public Schools, Massachusetts, elementary, middle, and high school English learners showed significant achievement gains on state assessments after using *READ 180* (2009).

Results of the 2006 to 2011 Striving Readers gold level studies² conducted in school districts—four of which used *READ 180* for a period ranging from one to five years—showed significant increases in reading achievement for struggling readers. In Newark, New Jersey, significant impacts were reported for all students, including student groups such as boys, African Americans, and students with disabilities. *READ 180* was shown to have a significantly positive impact on incarcerated students in the Ohio Department of Youth Services facilities, the majority of whom were male and African American, and a large percentage of whom were students with disabilities. Additionally, *READ 180* was shown to have a significantly positive impact for students in the urban-suburban school district of Springfield-Chicopee, Massachusetts, and the urban school district of Milwaukee, Wisconsin, both of which contain large percentages of economically disadvantaged students.

In 2009, a What Works Clearinghouse (WWC) review determined that the extent of evidence for the impact of *READ 180* on student achievement is medium to large for the outcome domains of general literacy achievement and comprehension (WWC, 2009). In a more recent study published in the peer-reviewed journal *Educational Evaluation and Policy Analysis*, *READ 180* was shown to have a significantly positive effect on reading comprehension and vocabulary for fourth- through sixth-grade students (Kim et al., 2011).

The What Works Clearinghouse determined that the extent of evidence for the impact of *READ 180* on student achievement is medium to large for general literacy achievement and for comprehension.

¹ Bronze level studies are single subject, pre-post studies.

² Gold level studies are randomized controlled trials.

THE READ 180 UNIVERSAL RESEARCH TIMELINE

1985-1999

EARLY RESEARCH

1985-1996

Partially funded by a grant from the **US Department** of Education's Office of Special Education Programs, research by Dr. Ted Hasselbring of Peabody College, Vanderbilt University, the nation's #1 graduate school of education, leads to a breakthrough prototype for software that uses individual student performance data to differentiate reading instruction.





VANDERBILT UNIVERSITY®

1994-1996

Dr. Hasselbring joins forces with Dr. Janet Allen of the University of Central Florida and Florida's Orange County public school system to create the Orange County Literacy Project for its lowest-performing students. The project's instructional model, rooted in research-proven literacy practices, becomes the basis of the READ 180 Instructional Model.

1997

We enter into collaboration with Vanderbilt University to replicate the best practices of their research in a published program. READ



180 adopts the Lexile® Framework for Reading, developed by Dr. Jack Stenner of MetaMetrics, Inc., as its leveling system. The framework provides a common metric for measuring text difficulty and student reading level.

1998-1999

Council of the Great City Schools pilots

READ 180 in some of its largest urban schools and enters into a research partnership to study the efficacy of the program.

READ 180 is published and immediately implemented in hundreds of schools nationwide.



2003-2006

VALIDATION & IMPLEMENTATION

2003

Dr. Sally Shaywitz publishes the breakthrough book Overcoming Dyslexia, where she states that the most successful programs for students with dyslexia emphasize the same core elements—practice manipulating phonemes, building vocabulary, increasing comprehension, and improving the fluency of reading—and cites READ 180 as a suitable intervention.

2004-2005

READ 180 aligns with all 15 structural and instructional recommendations contained in the report Reading Next: A Vision for Action and Research in Middle and High School Literacy (Biancarosa & Snow, 2004).



with **Dr. Ted Hasselbring** and a new partnership with Dr. Kevin Feldman and Dr. Kate Kinsella, READ 180 Enterprise Edition is launched.

ENTERPRISE EDITION

- Structured engagement routines are added to ensure full participation by ALL learners, including English learners.
- In addition to Spanish, second-language support in four new languages is added: Vietnamese, Hmong, Cantonese, and Haitian Creole.
- A digital platform for managing student data is introduced.



2006

Dr. Bill Daggett and the International Center for Leadership in Education (ICLE) champion READ 180 as the reading intervention program that most closely aligns with the center's recommendations on secondary school reform.



2006-2016

CONTINUED & SUSTAINED IMPROVEMENT BASED ON BEST PRACTICES

2006-2007

The Florida Center for Reading Research (FCRR) completes an independent and thorough review of READ 180 Enterprise Edition at the request of Florida districts and documents multiple strengths and no weaknesses.

The Council of Administrators of Special Education (CASE) endorses READ 180 for use with special education students. It was reendorsed in 2012 and 2015.



2007

National Assessment of Educational Progress (NAEP) begins measuring writing skills of fourth-, eighth-, and twelfth-grade students in narrative, informative, and persuasive formats.





The Alliance for Excellent Education (AEE) and the Carnegie Corporation publish Writing Next. outlining best practices in writing for older, struggling readers. READ 180 writing instruction aligns with all recommendations.

2007-2008

Dr. Kate Kinsella, coauthor of the READ 180 rBook, creates the **LBook**. Tested in classrooms throughout California by Dr. Kinsella, the LBook provides explicit systematic instruction for English learners who may be at differing levels of English proficiency.







Hartry, Fitzgerald, and Porter (2008) present positive outcomes of READ 180 implemented in after-school programs in the Harvard Educational Review article "Implementing a Structured Reading Program in an Afterschool Setting: Problems and Potential Solutions."

READ 180 is evaluated in the July-September 2008 issue of *Reading* Research Quarterly in an article titled "Effective Reading Programs for Middle and High Schools: A Best Evidence Synthesis," by Slavin, Cheung, Groff, and Lake (2008) of the Center for Data-Driven Reform at Johns Hopkins University.



The meta-analysis provides a positive assessment of READ 180, showing more evidence of effectiveness than the other 121 programs considered in the review. These results are also summarized on the Best Evidence Encyclopedia website (www. bestevidence.org), where READ 180 is cited as a Top-Rated Program for Middle/High School having Moderate Evidence of Effectiveness.

Dr. Marilyn Jager Adams, author of Beginning to Read, leads the development of System 44, a breakthrough foundational reading system combining the very best thinking on research-based phonemic awareness and phonics instruction for older students with the power of state-of-the-art adaptive technology.



Adams



Dr. Julie Washington, a leading authority on articulation and standard classroom English, builds instructional support for students who speak a community dialect and struggle with academic English.

2009

READ 180 takes its teaching system to the web with the READ 180 Interactive Teaching System.

The Journal of Research on **Fducational Effectiveness**

publishes a Gold-Standard (randomized controlled trial) study of adolescent reading interventions done by the Florida Center for Reading Research (FCRR) and Florida State University that reveals significant gains with READ 180 (Lang, Torgesen, Vogel, Chanter, Lefsky, & Petscher, 2009).

A review by the federal What Works Clearinghouse (WWC) concludes that the extent of evidence for READ 180 is "medium to large for comprehension and medium to large for general literacy achievement."



2010

The initiative for Common Core State Standards publishes standards that provide a consistent, clear understanding of what students are expected to know and be able to do.

We partnered with the Council of the Great City Schools and the American Institutes for Research (AIR) to release Implementation Matters: Systems for

Success (Salinger, Moorthy, Toplitz, Jones, & Rosenthal, 2010). Implementation Matters outlines district-wide conditions that sustain on-model implementation of READ 180 in urban school districts.



2011

US DOE-funded Striving Readers program results show that READ 180 significantly increased reading achievement for struggling students in several school districts across the country.



A US DOE-funded evaluation of READ 180 published in Educational Evaluation and Policy Analysis found that students who used READ 180 after school outperformed the control group on measures of reading comprehension and vocabulary (Kim, Capotosto, Hartry, & Fitzgerald, 2011).



READ 180 Next Generation is launched. With READ 180 Next Generation, leadership has more visibility into implementation metrics, allowing for a greater ability to course-correct in real time. Teachers have a simpler, easier-to-use instructional system with a more directed path for data-driven differentiated instruction, and students become more engaged and have more ownership of their learning.

2012

A review by the **National Center on Intensive** Intervention (NCII) concludes that the extent of evidence ranged from "partially convincing to convincing," demonstrating that READ 180 is effective as an RTI model.



2013

READ 180 for iPad® is launched, providing the ultimate personalized



learning experience for every student. Designed to help students meet the rigorous expectations of the new standards and experience success on the new assessments, READ 180 uses the key instructional shifts to accelerate achievement.

System 44 Next Generation is launched, the proven foundational reading program designed to get the most struggling readers on the path to meeting rigorous new standards. To support students in this, System 44 Next Generation includes explicit instruction in reading complex text and evidencebased writing.

2014

READ 180 and System 44 provide a solid return on investment (ROI) for Napa Valley Unified School District by significantly improving student outcomes on the CST ELA and the CELDT, by lowering referral rates into special education, and by decreasing suspension and expulsion counts.

The Reading Inventory is released with two subtests. a foundational reading assessment and a reading comprehension assessment, including more coverage to more accurately assess each individual student's instructional needs.

2015

In 2015, Scholastic Education and its programs such as READ 180 and System 44 were acquired by Houghton Mifflin Harcourt Corporation (HMH).

2016

READ 180 Universal is published to meet the demands of more rigorous standards while personalizing instruction to meet the cognitive, language, and social-emotional needs of each student. It is built on the influential work of authors Ted Hasselbring, Laura Goin, Kevin Feldman, Kate Kinsella, Marilyn Adams, Julie Washington, Laurie Cutting, Alison Bruhn, Steve Graham, and Karen Harris.



HOW READ 180 UNIVERSAL ADDRESSES THE FIVE STRANDS OF PERSONALIZED LEARNING

Teachers are the most integral component of effective, personalized learning programs. In designing *READ 180* Universal, the essential role of the teacher in providing personalized learning was recognized. In addition to the crucial role of the teacher, five strands that have been identified as effective in accelerating implementation of technology-enabled personalized learning (National Summit, 2014) were considered in the development of the program. Below is a description of these strands and how the design of *READ 180* Universal applies to them.

STRAND 1: DATA

Personalized learning requires a robust, timely, and dynamic picture of student performance, preferences, and needs.

Teachers need real-time access to meaningful data to more effectively guide students' learning experiences. Having meaningful data such as ongoing and embedded performance data, information on student learning strategies, preferences and interests, and other non-academic information regarding the whole child's needs allows teachers to work at maximum capacity.

READ 180 Universal allows for this by providing timely, actionable data to students, teachers, and school leaders in order to inform instruction and to more effectively personalize the learning. READ 180 Universal's real-time data and student assessments help teachers pinpoint exactly where individual students must focus so they can master the foundations of reading and move toward more advanced skills such as higher-order thinking, problem solving, and academic writing.

STRAND 2: CONTENT AND CURRICULUM

Personalized technology allows for "recommendation engines" that guide instruction based on student data, student choices and interests, and teacher insight. In this way, both teachers and students play a major role in determining the content and curriculum that will be most effective for students. Recommendation engine systems allow for the optimal matching of learning opportunities with student needs and preferences in order to create maximal learning environments.

READ 180 Universal's Student Application (Student App) identifies where students are and helps them learn at their own pace to get them where they need to be. Powered by the FASTT (Fluency and Automaticity through Systematic Teaching with Technology) algorithm underlying READ 180 Universal, the Student App provides students with repeated structured practice with limited sets of new material, which is how the brain learns best. READ 180 Universal provides

teachers with tools to help inform instruction through student data, grouping tools, and observation tools. The grouping tool on the Teacher Dashboard groups students according to their specific needs identified through ongoing assessment, allowing teachers to easily and efficiently plan differentiated instruction and intervention.

STRAND 3: TECHNOLOGY ARCHITECTURE

Technology architecture refers to enterprise systems that can access and manage data, content, and communications. It creates an integrated approach to curriculum that allows access to information anytime and anywhere. These types of platforms are needed for school systems to gather and analyze assessment and other data, deliver multi-modal and universally designed resources, and match these two areas based on ongoing assessment of student performance and needs.

In READ 180 Universal, teachers and leaders have access to HMH Teacher Space, a platform that gives educators real-time, actionable data and reports. HMH Teacher Space is a comprehensive online management system that collects and organizes READ 180 Universal student performance data. This includes a suite of reports that can be accessed through individual Teacher Dashboards and Leadership Dashboards. HMH Teacher Space management system supports teachers in decision making on placement, grouping, and instruction, as well as monitoring progress. It supports schools in meeting Adequate Yearly Progress in accountability requirements and districtwide data aggregation for teachers, district administrators, and technology coordinators.

STRAND 4: RESEARCH AND DEVELOPMENT

Since teachers and students are at the center of personalized learning, research and development is necessary in order to translate the vision of this type of learning

into effective implementation of it. Cognitive and brain science research, adaptive tutorial software development, and change management and professional development best practices are needed for effective school redesign into a student-centered model.

READ 180 Universal is the result of decades of iterative research constantly informing and enhancing program development. In 1999, READ 180 was born out of a research partnership between practitioners, scholars, and the HMH Intervention Solutions team. READ 180 Universal incorporates seminal and current advancements in research and understanding of learning strategies, best instructional practices, and the latest technology developments. READ 180 Universal further benefits from its academic authors, who ensure that the program best reflects their areas of expertise.

STRAND 5: HUMAN CAPACITY

Technology plays a role in making personalized learning effective; however,

teachers play the primary role in ensuring that the technology-enabled personalized learning will be successful. Systems must be designed with the input of all stakeholders, including teachers, students, administrators, and families. The technology-enabled personalized learning, approached in a systematic way and with the teacher as the key player, should be viewed as integral to student learning.

READ 180 Universal allows for this by putting the teacher front and center and designing the technology in a way that meets the needs of teachers, students, and parents. READ 180 Universal is designed with the understanding that achieving reading success with upper-elementary and secondary students requires more than teaching reading strategies. The development process for READ 180 Universal included user and pilot testing with students, teachers, administrators, and families. As a result, READ 180 Universal's blended learning approach helps teachers, administrators, and families support competencies and capacities in students that are pivotal for advancing from struggling reader to competent reader.



The Student App delivers personalized instruction tailored to each student's needs and interests.

THE READ 180 UNIVERSAL INSTRUCTIONAL MODEL

In the *READ 180* Universal instructional model, Whole-Group Learning, Student Application (Student App), Small-Group Learning, and Independent Reading are Station Rotations that are all utilized to maximize learning and teacher effectiveness.

Whole-Group Learning: Using a blended learning model, teachers begin each class by facilitating instruction in reading skills and strategies, content-area and academic vocabulary, writing, conventions, and academic discussions to the whole class. The class completes multiple readings of engaging, grade-level texts that increase in complexity using a gradual release model. In the beginning of this gradual release approach, the teacher reads the text aloud to students, modeling fluency and guiding students to an understanding of the text's central ideas. Whole-Group Learning also includes systematic instruction in vocabulary and writing. Vocabulary instruction helps students strengthen their language skills. Scaffolded writing instruction models and helps students develop writing skills and culminates in an essaylength writing activity. The teacher guides students in analyzing a model text and then uses routines to help students internalize the writing process.

Student Application (Student App): Students work independently on the *READ 180* Universal Student App, where they follow a path that allows them to work within their zone of proximal development. Each segment of the Student App consists of six zones that provide targeted instruction, practice, and feedback on the components of reading for which students need the most assistance: Explore Zone, Reading Zone, Language Zone, Fluency Zone, Writing Zone, and Success Zone. The students move through the zones on individualized paths that take their performance on assessments and previous Student App activities, engagement, interests, and teacher inputs into consideration.

- In the Explore Zone, students watch an Anchor Video to build background knowledge and develop a mental model for the segment and then complete a vocabulary-based activity focused on highleverage vocabulary to determine if they need additional vocabulary practice before reading the target passage.
- In the Reading Zone, students complete multiple readings of the
 target passage, giving them the opportunity to build fluency, learn
 academic vocabulary, and practice reading comprehension strategies
 that are specifically applicable to the particular passage.
- In the Language Zone, students build and expand their vocabulary knowledge through language-based activities.
- In the Fluency Zone, students practice reading and spelling with a
 variety of words and patterns in order to automate these processes,
 which in turn will allow their cognitive resources to focus on higherorder comprehension tasks.
- In the Writing Zone, students practice the writing strategies for narrative, informative, and argument writing that they have learned in Whole-Group and Small-Group lessons.
- In the Success Zone, students build and apply the fluency and comprehension strategies they have learned and practiced in the other zones on discrepancy, context, and stretch passages.

Small-Group Learning: Students receive individualized, data-driven instruction that meets their unique learning needs while building meaningful relationships with their teachers. During text-based lessons, the teacher facilitates a close reading exploration of the text in small groups. The teacher models essential reading strategies and then guides students in a collaborative analysis and discussion of the text. During writing lessons, the teacher guides student collaboration on writing tasks. Students are able to share ideas and give and receive feedback from their peers at all stages of the writing process. The evidence-based instructional routines build engagement and foster high-level thinking.

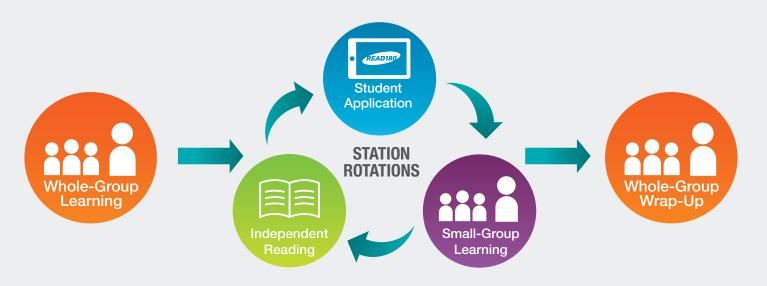
Small-Group Learning is a true formative experience: the teacher has supports to quickly check student understanding during instruction as well as options to adjust instruction based on in-the-moment data.

Independent Reading: Students engage with complex, content-rich literature and informational texts that they can read with success. Students can apply comprehension strategies they are taught, including context clues, making inferences, cause and effect, and more. The *READ 180* Universal Independent Reading rotation is designed to foster accountable independent reading in students. Specifically, during Independent Reading, students complete graph organizers and after, students take an HMH *Reading Counts!* quiz. The library consists of print books and digital reads. The digital library consists of both eBooks and eReads, which are relevant, current, and engaging articles of differing

modalities and length. In addition, the *READ 180* Universal library includes audiobooks in which an audio coach models fluent reading and reading-comprehension strategies throughout the text.

Station Rotations: After Whole-Group Learning, students rotate between Student App, Small-Group Learning, and Independent Reading stations at the teacher's discretion. As students rotate through the stations, they receive explicit instruction, guided practice, and personalized feedback on the internalization of new content and learning strategies—and then reconvene for a Whole-Group Wrap-Up to reinforce what they have learned.

■ The READ 180 Universal Model for Blended Learning





EVIDENCE BASE

READ 180 Universal is informed by an extensive evidence base of best practices for serving struggling adolescent readers. In the following section, relevant information from the research base and expert opinion is presented alongside descriptions of how these research foundations have been translated into the curriculum and instructional design of the program.

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THE READING BRAIN

Five principles help to explain the **relationship between students'** brains and the task of learning to read:

- The brain forms new circuits for written language from older genetic processes like vision, language, cognition, and emotional systems.
- 2. The development of these circuits depends on the language environment and the particular writing system.
- 3. Neurons are reprogrammed to form the reading circuits.
- 4. The more readers know about words, and about how words function within sentences and stories, the faster a reading circuit is strengthened.
- Reading is ultimately about going beyond the text to make connections to one's experiences and thoughts (Wolf, 2013).

Comprehending text involves disparate processes, from perceiving words, to identifying text structures, to understanding the relationships between characters in a story. These processes are associated with activation in different parts of the brain. Neuroscience research has found that, when a student reads about an action or emotion, the activation in the brain is consistent with the student experiencing that action or emotion. For example, when a student reads about a character riding a bike, the parts of the brain responsible for helping the student ride a bike are activated (Rose, 2014; Wehbe et al., 2014).

Activation patterns in the brains of good readers and struggling readers differ dramatically. The reading circuits in the brains of struggling readers are more scattered and less established than in the brains of good readers. But research has demonstrated that intensive instruction in and deliberate practice of reading skills and strategies can change the way that struggling readers' brains work. Technology-based reading instruction can identify a student's weaknesses, alert the teacher for individualized instruction, and give the student personalized, targeted practice (Cunningham & Rose, 2013).

Comprehension occurs as a cluster of skills that develop simultaneously. Among these skills are higher-order processes, such as inference generation and reasoning, that allow readers to recognize meaningful relationships among text elements and between text elements and background knowledge (Kendeou, van den Broek, White, & Lynch, 2009; Cutting & Scarborough, 2006).

Higher-order cognitive skills, such as making inferences and planning and organizing information, help students comprehend more complex text and question types. As such, developing these higher-order skills is important to reading growth as students progress in school (Eason, Goldberg, Young, Geist, & Cutting, 2012).

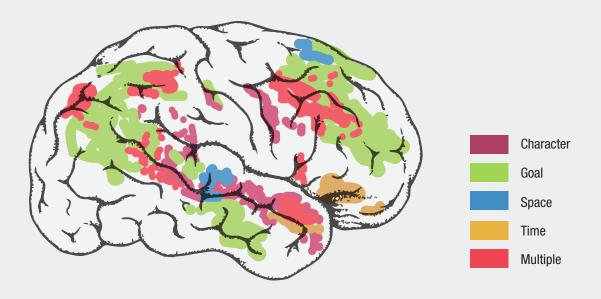
Systematic instruction and practice help students learn executive function skills such as setting goals, planning, organizing and prioritizing materials, managing time, being cognitively flexible, self-monitoring, and self-reflecting (Meltzer, 2007). Neuroscientific brain research shows that when students understand the goals of their work, they are more likely to stay focused, self-monitor, and appreciate their own progress (Medina, 2014; Rose, Meyer, Strangman, & Rappolt, 2002).

Reading aloud to students exposes them to a broader vocabulary of words in a different "voice," brings students and teachers together in a communal way, and allows the brain to have new experiences and imagine different worlds in which people react in different ways to different situations (Medina, 2014).

READ 180 Universal instruction incorporates the latest research and principles of how the brain learns to read. The content within the program **engages and motivates students**, resulting in activation of disparate parts of the brain that are vital to reading with comprehension. READ 180 Universal is a comprehensive reading intervention that addresses the needs of struggling readers and provides instruction, support, and practice in the areas that are most needed for each individual student. The authors of the program carefully considered the strengths and weaknesses of specific student populations and designed instruction that will meet their needs at a variety of levels. Data from assessments and the **Student Application (Student App)** rotation are leveraged to identify students' specific needs, strengths, and interests to target instruction in the areas that students need assistance.

Anchor Videos activate and **strengthen vocabulary and background knowledge** circuits in the brain, allowing students
to comprehend and link passages to their existing knowledge.
Structured practice in decoding, encoding, and reading words fluently
allows students to automate those processes and focus their cognitive
attention on the difficult work of comprehending complex text. The
engaging and motivating texts that students encounter encourage
them to work through their struggles and persist even when the
passage is challenging.

■ The New View of Reading



The "new" view of reading comprehension in the brain shows the disparate areas of activation when students are learning to read (Rose, 2014).

FOUNDATIONS FOR READING

Learning to read skillfully is a complex process that begins with foundational literacy skills. When these foundational skills have been strategically and automatically mastered, skilled reading with comprehension can occur. As the research shows, students' knowledge of the correspondence between sounds and spellings determines their ability to read single words with speed and accuracy, which in turn predicts their ability to read and comprehend texts (Adams & Bruck, 1995; Scarborough, 2002; Wagner, 2008).

Struggling readers are likely to suffer from deficits in phonemic awareness and phonological processing. These deficits may not be evident until the third or fourth grade and are likely to impede reading ability throughout the lifespan without intervention (Lipka, Lesaux, & Siegel, 2006).

Direct instruction in phonemic awareness and phonics improves word recognition skills, which in turn improves reading comprehension. Explicit and systematic literacy instruction that focuses on foundational skills taught in the context of meaningful, level-appropriate text has proven especially important to improved reading abilities for struggling readers and students with disabilities (Adams, 1990; National Early Literacy Panel, 2008; National Reading Panel, 2000; National Research Council, 1998).

Multisensory learning approaches allow students to master the foundational literacy skills necessary for comprehension. Providing direct, systematic, sequential, and cumulative instruction in phonology and phonological awareness, sound-symbol association, syllable instruction, morphology, syntax, and comprehension allows for the fluency and automaticity of word recognition required for skilled reading (Birch, 2011; McIntyre & Pickering, 1995).

Foundational reading instruction should be integrated with opportunities to read meaningful connected text as part of a coherent instructional approach (Adams, 1990; Moats, 2012; Strickland, 2011).

Rigorous state standards stress that "foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend text across a range of types and disciplines" (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010, p. 15).

Each Workshop in *READ 180* Universal begins with a text designed to **allow students to practice and build fluency**. This text is written with decodable words, sight words, and other elements that make the text considerate—and includes foundational skills instruction and practice to help students automate the word recognition and reading processes. The workshop fluency texts provide practice and reinforce skills and patterns that students learn on the Student Application (Student App) as they build reading fluency.

READ 180 Universal provides explicit, systematic instruction in the research-based foundational and higher-order comprehension skills and strategies necessary for understanding text. These skills and strategies, from word decoding to making inferences, are **modeled** in Whole and Small Groups, **practiced** in Student App, and **applied** during Independent Reading.

The HMH Teacher Space **guides teachers in leading Wholeand Small-Group lessons** in which they teach, model, and guide practice in comprehension and critical-thinking skills and strategies, using a wide range of expository and narrative texts. A gradual release approach is used throughout *READ 180* Universal teacher-led instruction and in the Student App, which provides scaffolding for students as they learn to internalize comprehension skills and strategies.

READ 180 Universal instruction is **designed to systematically bolster students' comprehension of text** before, during, and after reading, using research-based techniques that are beneficial to struggling readers, English learners, and students with disabilities.

Before reading, Anchor Videos, teacher-led lessons, and vocabulary development lessons in the Student App help students activate prior knowledge and build mental models of new concepts. During reading, the Student App helps students comprehend the text by providing definitions for unfamiliar words, identifying signal and vocabulary words in the text, and personalizing coaching and feedback to keep the students on task and encourage them to use helpful supports. Finally, *READ 180* Universal instruction includes activities and routines to assess and reinforce comprehension after reading.



READ 180 Universal students can practice and reinforce foundational reading skills in the Student App.

LANGUAGE DEVELOPMENT

Language should be used in the classroom to **bridge information gaps**, to communicate ideas and information, and to "get things done." The purpose of language is to communicate in real-life ways. To meet rigorous standards, students need to learn how to use language to clearly communicate their ideas around what they are learning (Zwiers, 2014).

Academic language refers to the form of the English language that is expected in situations such as the discussion of topics across the curriculum, making arguments, defending propositions, and synthesizing information. Written and spoken academic discussion is significantly different from informal discussion as academic language is characterized by specific types of vocabulary, text structures, and grammatical structures (Dutro & Kinsella, 2010; Snow, 2010).

Instruction for English learners should emphasize academic language, specifically the specialized language associated with academic instruction and content areas. Students that receive instruction in and are able to use decontextualized academic language are more likely to be successful than students who use contextualized social language (California Department of Education, 2010).

Research shows that there is a **strong reciprocal relationship between reading comprehension and knowledge of both conversational and academic language** (Baumann, Kame'enui, & Ash, 2003; Duke & Pearson, 2002; Gersten, Fuchs, Williams, & Baker, 2001).

The interaction between academic language and academic content is a great challenge for English learners, thus contributing to **gaps in achievement** between ELs and English-proficient students (Anstrom, DiCerbo, Butler, Katz, Millet, & Rivera, 2010). English learners bring meaningful experiences and content knowledge to the classroom that can be leveraged to accelerate their language development. Expert opinion supports incorporating structured peer discussions around relevant content-area literacy instruction so that students have multiple opportunities to practice and hear academic language—especially important for English learners and those who speak nonstandard dialects of English (Beck, McKeown, & Kucan, 2002; Dutro & Kinsella, 2010).

To add **new academic words** to their expressive vocabularies, students need structured classroom contexts that offer frequent and accountable opportunities to use the new terminology in their speaking, listening, and writing (Feldman & Kinsella, 2008).

READ 180 Universal provides a comprehensive and systematic approach to developing the language skills of students. Through carefully scaffolded reading, writing, and speaking activities, students learn the phonological, morphological, syntactical, and semantic structures of English—particularly academic English. In Whole- and Small-Group Learning, high-utility academic vocabulary is taught through a research-based instructional routine, promoting understanding of words that students will encounter in all subject areas.

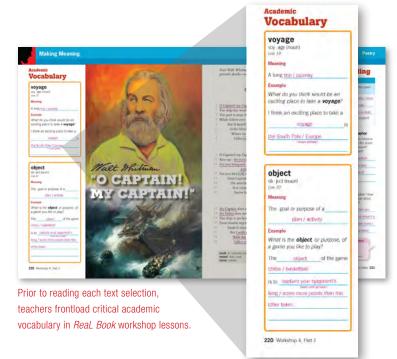
In each Whole- and Small-Group lesson, teachers teach and assess two or three language goals focused on vocabulary, language functions, and language of reading, writing, and speaking. **Language functions** stem from the linguistic demands of a lesson task and focus on high-leverage language that will serve students in other contexts. Across the year in *READ 180* Universal, students develop expressive language skills to:

- Discuss
- Reflect
- Compare/Contrast
- Collaborate
- Exchange Ideas
- Report
- Make Connections/Associations
- Offer Feedback

READ 180 Universal also provides **explicit and systematic instruction** through Whole- and Small-Group Learning in word
learning strategies, giving students the tools they need to learn new
words independently. Recursive vocabulary in reading selections
encourages frequent review, practice, and reinforcement of targeted
words. Independent reading materials in READ 180 Universal provide
further exposure to increasingly advanced vocabulary and include
supports such as graphic organizers to help students comprehend the
vocabulary and content.

At the beginning of each segment of the Student Application (Student App), students complete the **Explore Zone**. In the Explore Zone, students are **introduced to context-relevant vocabulary words in the Anchor Video** and then complete activities that activate their vocabulary and real-world knowledge before reading the passage. During the **Language Zone** of Student App, students **build and expand their academic vocabulary knowledge** through language-based activities that investigate word families, words in context, synonyms and antonyms, and examples and non-examples. Students complete practice activities using definitions and context sentences for each word—crucial supports that can help struggling readers and English learners alike acquire vocabulary as they read. In the **Reading Zone**, students practice words-in-context skills during the Close Read activity, which includes words-in-context questions for three power words per level.

In the *READ 180* Universal *ReaL Book*, students have the opportunity to practice the academic language they have learned in Wholeand Small-Group Learning in discussions with their peers. These discussions help to develop students' oral language skills using the language of school. Giving students time to practice and develop oral language is especially helpful for those students who are struggling readers, English learners, and students with disabilities.



BACKGROUND AND CONTENT KNOWLEDGE

People construct **new knowledge and understandings** based on their existing knowledge (Bransford et al., 2000). Research shows that background knowledge is critical to reading proficiency (Adams, 2009; Lee & Spratley, 2010; Torgesen et al., 2007). Knowledge of subject matter is necessary in order to understand what is read (Hirsch & Pondiscio, 2010).

Content knowledge and reading are inextricably intertwined—reading will never progress beyond decoding without a foundation of content knowledge. The ability to comprehend a text depends greatly on the knowledge of the subject that the reader brings to that text. A program that enriches the knowledge of students is a must for reading improvement (Hirsch, 2014).

In order to build content knowledge, students must read an adequate number of **high-quality**, **complex**, **and engaging texts** that allow them to study a topic for a sustained period of time. Infusing these content-rich texts into the English Language Arts curriculum allows students to spend an extended part of the school day not only reading, but also gaining knowledge that will allow them to read more complex texts in the future (Wattenberg, 2014).

Some students face **barriers to learning** because the representation of information assumes certain critical background knowledge and content knowledge. Since there is such a wide range of individual differences among students, ensuring that all students have equal opportunities to learn requires providing options and alternatives, such as videos that anchor instruction (CAST, 2011).

Within software, both direct, **explicit instruction** and providing structured problem-solving guidance can be effective at enhancing

anchored instruction, each at different levels depending on the complexity of the task. The most effective interactive learning environments take into consideration the needs of a particular situation (Zydney, Bathke, & Hasselbring, 2014).

Dynamic images and sounds are especially helpful for students with limited background knowledge and English learners (Hasselbring & Glaser, 2000; Lacina, 2004). Using multiple representations of video information with struggling students gives them an authentic base of experience in abstract domains, thus making the abstract information more concrete (Heo, 2007).

Mini-anchors may be a valuable approach to use for creating adaptable learning environments. They serve as a prescription for how to individualize instruction by embedding multiple, short, video-based scenarios within a computer-based program. In this way, mini anchors provide learners with multiple ways to perceive, engage with, and interact with instructional content (Zydney & Hasselbring, 2014).

Successful readers have a strong vocabulary, background knowledge on a diversity of topics, and fluency that allows them to focus on the meaning of the text. These readers gain exponentially more vocabulary, knowledge, and fluency as they read, which allows them to read more texts and build their knowledge base even more. Struggling readers continue to fall further and further behind because they can't access the knowledge and understanding of successful readers. This rich-get-richer and poor-get-poorer outcome is known as the **Matthew Effect** (Stanovich, 1986). Without early and effective intervention, struggling readers never gain the background knowledge they need to be effective readers and only fall further and further behind.

READ 180 Universal is designed to help students acquire and activate the background and content knowledge that is essential to reading comprehension. Before reading a text in a Workshop or in the Student Application (Student App), students watch an Anchor Video that provides them with the content and vocabulary knowledge they need to comprehend the text. These Anchor Videos not only contribute immediately to improved comprehension of the texts that students read, but also give students knowledge that they can transfer to unfamiliar texts, allowing them to build more knowledge and continue to read more in a virtuous cycle.

At the core of *READ 180* Universal are multitudes of informational texts that stretch across the content areas, such as social studies, science, literature and the arts, and contemporary social issues in order to **build the domain knowledge that is critical to reading comprehension.** By spending an extended period of time within a Knowledge Cluster, students are able to develop the knowledge that comes from deep and meaningful study of a topic. Through this engaging, diverse content, *READ 180* Universal readings help students **develop the strong base of world knowledge** and interdisciplinary literacy skills that they need in order to better comprehend texts across the curriculum.

Concept Map

In each long, with a series of more price price

READ 180 Universal makes systematic and extensive use of mental models to help students build background knowledge and improve comprehension of texts. READ 180 Universal **exposes students to multiple text types** in order to build students' world knowledge and prepare them to comprehend across the content areas. The content in all components of READ 180 Universal reflects diverse perspectives, allowing students to both reflect on their own experiences and explore new concepts and points of view.

The Anchor Videos included in the *READ 180* Universal Student App and Workshops introduce students to the concepts and vocabulary they will need to access the related text passages. The videos and subsequent language development activities aid students in **developing a mental picture of what they are about to read, resulting in improved comprehension.** The combination of video and vocabulary support is especially helpful for English learners who may have gaps in context information and/or academic language.

READ 180 Universal teacher-led instruction further supports the building of background knowledge to enhance comprehension.

HMH Teacher Space includes specific instructional routines to prepare students for reading, such as the academic discussion routine which helps build background about a particular concept that is critical

to the Workshop texts. As part of this routine, students brainstorm, write, exchange, record, and report on their ideas. Students also use the Vocabulary routine to learn key content-area vocabulary words that appear in subsequent texts. This routine enables students to learn new themes, discuss examples, and practice using the vocabulary prior to encountering these words in texts. In addition, Resources for Differentiated Instruction in HMH Teacher Space include lessons that teachers can use to **build students' background knowledge** and promote mental model development during Whole-Group Instruction.

Concept Mapping helps build domain knowledge in READ 180 Universal.

TEXT COMPLEXITY

The Common Core State Standards require that all students read grade-level, complex texts, but many readers are not able to do so independently. **Thoughtful and informed instruction and scaffolding can help students tackle complex text.** Teaching students how to pay close attention to the text, reread, annotate the text with notes in the margin, identify the author's purpose and text structure, circle confusing words or sections, talk about the text with others, and ask text-dependent questions can be beneficial in helping students comprehend complex text (Liben & Liben, 2013).

There are many factors that contribute to the **complexity of a text**. In addition to word difficulty, sentence length, and sentence structure, the genre and structure of the text can also affect the readability of a passage. Texts in familiar genres and that are well structured with signal words are easier to read than unfamiliar, less-structured texts (Williams et al., 2014). Another factor that contributes to text complexity is cohesion, or the characteristics of the text that help the reader connect ideas in the text. Texts have several layers of cohesion: within sentences, within paragraphs, and across the texts (Graesser, McNamara, & Kulikowich, 2011). It is important to consider all of these factors when assessing the complexity and readability of a text.

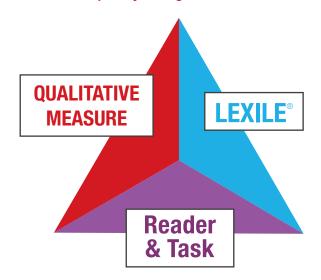
Reading is fundamental for meeting life goals, such as becoming informed, accomplishing tasks, pursuing interests, and raising children. Unless students learn how to read texts of real-world complexity, they will be unprepared for college, careers, and life in general. When students read complex texts, they gain new language and knowledge that they need in order to access ever more advanced texts (Adams, 2009; 2011).

Immersion in complex texts is one of the best ways to help students develop mature language skills and the conceptual knowledge they need for success in school and beyond (Bridges, 2014).

Studies indicate that **exposure to a wide range of texts** strengthens understanding of the relationships among different words and concepts—building a "word consciousness" that enables the reader to more easily interpret the meanings of previously unencountered words (Adams, 2009).

For students to acquire **the language of literacy**, or academic language, they must encounter these structures and patterns in the materials they read. Providing students with exposure to complex texts allows them access to academic language, and having them interact with the texts allows them to discover how academic language works (Fillmore & Fillmore, 2012)

■ Text Complexity Triangle



*Qualitative Measures:

HMH measures the levels of meaning, structure, language conventionality/clarity, and knowledge demands of increasingly complex texts. Students receive decreasing scaffolding in order to demonstrate growth and move toward independence.

Quantitative Measures:

The Lexile Framework measures fiction and nonfiction texts and readers on the same scale.

Reader & Task Considerations:

HMH supports teachers as they match reader to task. READ 180 provides carefully calibrated, high-interest texts in a variety of formats to maximize student choice and engagement. Highly motivated students read more. As they read, they build content-area knowledge and gain ability and expertise as readers.

READ 180 Universal guides students from highly supported reading toward independent mastery of increasingly complex text, enabling students of all reading levels to access content-rich complex texts.

Houghton Mifflin Harcourt (HMH) has created a version of the Common Core State Standards (CCSS) text complexity triangle. The **Text Complexity Triangle,** shown on the opposite page, measures the three components of text complexity as outlined by CCSS: Quantitative (Lexile measure), Qualitative, and Reader & Task.

Real Book Workshops include two types of texts: Fluency Texts and Workshop Texts. The first text in a Workshop is always a fluency text that introduces the Workshop topic, and serves to build knowledge about the topic. Workshop texts that follow are more complex and represent a variety of text types and lengths. The texts within a Real Book Workshop are sequenced to build on each other in order of increasing difficulty. The background knowledge and vocabulary that students develop from initial selections allow them to move from simple to more complex text. The Teacher's Edition Planning Guide includes a Heads Up section with challenges that students may experience with each text. Multiple reads, explicit vocabulary learning, teacher-led close reading, and Real Book scaffolds support students as they work toward reading increasingly complex and grade-level texts.

The Qualitative Components of text complexity considered by *READ 180* Universal include those identified by Coh-Metrix as the most important factors in readability: narrativity, syntactic simplicity, word concreteness, referential cohesion, and deep cohesion (Graesser, McNamara, & Kulikowich, 2011). As students progress through the Student Application (Student App), the texts that they encounter become relatively more complex in each of these dimensions. The relative complexity of each of these dimensions is offset by the other dimensions, providing scaffolds for the students to read and

comprehend increasingly complex texts.

READ 180 Universal provides teachers with the tools to expertly match reader to text and task. The variety and volume of texts in READ 180 Universal provide varying degrees of complexity and scaffolding, allowing students to access texts at the appropriate level of challenge and move toward independence. The adaptive technology in READ 180 Universal customizes instruction and practice according to students' Lexile measures and other quantitative and qualitative factors that make up the student's learner profile, providing continual opportunities for all students, including English learners and students with disabilities, to experience success and demonstrate progress. Throughout READ 180 Universal, each reading is marked with an icon displaying its Lexile measure and complexity level to assist teachers in effectively matching readers with appropriately leveled texts.

Using the above dimensions, each Workshop entails a series of increasingly complex texts—a diverse array of classic and contemporary literature as well as challenging informational texts in a range of subjects. Each Workshop supports students in accessing complex texts through a narrow reading approach in which students read a series of increasingly challenging texts with overlapping topics and recurring academic vocabulary. Each new text builds on the previous media and texts, providing students with the background knowledge, vocabulary, and confidence needed to access complex texts that might otherwise have been too challenging.

INDEPENDENT READING AND READ ALOUDS

Explicit and systematic cognitive research that has been conducted over many decades has revealed that reading not only builds our brains; it also exercises our intelligence (Bridges, 2014). Reading is a rich, complex, and cognitive act that provides us with a great opportunity to exercise our intelligence in ways that we lose if we do not read (Cunningham & Zibulsky, 2013).

Decades of research have shown us that **avid readers** are also skillful readers and writers. They have more knowledge about the conventions of language in areas such as spelling, punctuation, grammar, and vocabulary. They also know more about the world (Bridges, 2014).

Students will not become successful **independent readers** unless they are given the chance to practice reading independently. By giving students the opportunity to choose texts in which they are interested, they will be able to read more complex texts because they are motivated and often knowledgeable about the topic (Liben & Liben, 2013).

Half of children ages 6–17 who read independently as a class or school (52%) say it's one of their favorite parts of the day and wish it would happen more often. Almost all children in this age range (91%) say that their favorite books are ones that they choose themselves. One-third of children aged 6–17 (33%) say their class has a designated time during the school day to read a book of their choice independently, but only 17% do this every or almost every school day (Scholastic, 2015).

Findings from the Kids & Family Reading Report (2015) showed that 54% of children ages 0–5 are read aloud to at home five to seven days a week, and 40% of children ages 6–11 who are no longer read aloud to at home wish that they were. Among a wide

range of age groups, 83% of kids say that they liked a lot the times that their parents read to them aloud at home, and they wish their parents had continued to read to them after they reached school age.

It is important that parents and teachers **read to their children and students every day**. Reading aloud together is one of the best ways for children to learn to read. The most important thing is to let children set their own pace and have fun during the experience (American Academy of Pediatrics, 2015).

Although 61% of children have read an ebook, a nearly equal number—65%—agree that they'll always want to read books in print (Scholastic, 2015), making it important to offer texts in both mediums to engage all learners.

Research on students' **use of digital and print text** suggests that middle-grade students could benefit from direct instruction for comprehending digital text along with practice interacting with digital texts. In particular, students need to develop better strategies for making sense of digital text instead of over-applying the strategies they use with print text (Davis & Neitzel, 2012).

Respected literacy researchers Gina Biancarosa and Gina S. Griffiths (2014) offer several recommendations for teachers to **integrate technology** and digital texts into their existing classroom routines. In particular, they argue that technology should be viewed as one tool many teachers use to prepare students for literacy in a digital age. When incorporating digital tools into a classroom, their recommendations include selecting evidence-based technology, providing ongoing support to teachers using the technology, and making good use of the data provided by the technology.

READ 180 Universal **ensures that students make reading part of their daily routine** by dedicating one of the three Station Rotations to independent reading. Texts in the Independent Reading rotation provide engaging content that is delivered at the appropriate level of the student. Students also have the option of choosing more challenging texts that are aligned with their interests.

Independent reading is designed to foster student choice and a love of reading, but also includes checkpoints for accountability and teacher insight on student progress. The *READ 180* Universal Independent Reading library consists of **print books and digital reads**, including eBooks and eReads, as well as audiobooks that **model fluency and reading comprehension strategies**. Students are provided scaffolds for eReads, which are relevant, current, and engaging articles of differing modalities and lengths. Two of the eReads that are included in the library are a story of a teen that survived the Boston Marathon bombing and the story of a teen trapped in a deadly storm who survived using tips he learned on reality TV.

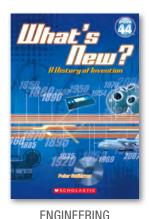
READ 180 Universal offers Independent Reading supports for students and teachers. In the digital Independent Reading experience, students

can access additional supports, such as text-to-speech as well as a dictionary. **The resources available to teachers include:**

- Summaries of each book
- Questions that can be used for one-on-one conferences with aides, students, and parents
- Ideas for final projects, such as book reviews and letters to authors

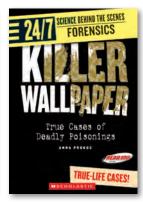
After finishing an Independent Reading book, students can take HMH *Reading Counts!* quizzes. When students log on to HMH *Reading Counts!*, they see the books they have completed and can then choose to take either an HMH *Reading Counts!* quiz or a H.O.T. Quiz—the latter of which is a more challenging quiz. The choices that students make will give the teacher insight into their mindsets, motivation, and challenge-seeking behaviors. The teacher will know how many books students have read and how they have challenged themselves. Students will also complete reading logs to track their progress toward the goals they set at the beginning of the year. Students can log their progress in *Real Book* or during the Student Application (Student App) or Independent Reading rotation.

Engaging Titles Across Content Areas



The World's Fastest Couch and Other Fast Things

MATHEMATICS







TECHNOLOGY

SCIENCE

ARTS & LITERATURE

WRITING FOR UNDERSTANDING

The ability to write effectively is critical to reading development. Writing instruction can have a positive impact on students' reading skills and comprehension, particularly when students analyze and interpret texts in writing, write summaries, and answer questions about them in writing (Graham & Hebert, 2010).

Reading and writing go hand in hand. By identifying and explicitly discussing the features of different texts, teachers can support students' comprehension and offer models for writing (Schleppegrell, 2009).

Teachers can **use writing instruction as a tool to promote knowledge** and as a mechanism for **higher-order thinking** (Graham & Hebert, 2010). To be well-prepared for college, the workplace, and life, students need opportunities to develop critical thinking skills, discussing and critiquing different viewpoints in order to form and justify their own stance (Carnegie Council on Advancing Adolescent Literacy, 2010; Lewis & Moorman, 2007).

Instructional programs that incorporate units of study stress the reading-writing connection as students engage in higher-order thinking skills, such as reading and writing about a wide range of text types, comparing and contrasting the structure of complex texts, and analyzing how an author's writing decisions contribute to the text's structure and meaning (Pytash & Morgan, 2013; National Governors Association Center for Best Practices, Council of Chief State School Officers (2010).

Meta-analyses of writing instruction, including studies of struggling writers, have found several strategies to have moderate to strong evidence for improving student writing including: (a) teaching

students strategies for planning, drafting, sharing, evaluating, revising, and editing; (b) teaching students procedures for regulating the writing strategies they are taught; (c) teaching students spelling, handwriting, and keyboarding; (d) setting clear and specific writing goals; and (e) giving students opportunities to work together to plan, draft, revise, and edit their papers (Graham, McKeown et al., 2012; Graham, Harris, & Santalego, in press; Graham & Perin, 2007a, 2007b.)

English learners need significant, structured opportunities to engage in academic discourse through speaking and writing (Francis et al., 2006; Kinsella & Feldman, 2005). For English learners, structured approaches to teaching writing have been found to be more effective than approaches without structure or scaffolds (Shanahan & Beck, 2006).

All students, especially English learners, will benefit from writing instruction that teaches them how English works. This instruction will help students **gain an understanding of text structure and cohesion**, use nouns, verbs, and adjectives effectively to expand and enrich ideas, and connect and condense ideas within sentences (California Department of Education, 2012).

Writers must know about what they write in order to communicate important information. Central to effective writing is **the means to express language and thought** in a way that allows readers to understand what the writer is saying. Before beginning to write, students should understand both the complex ideas that they would like to convey as well as the necessary grammatical structures needed to convey them effectively (Vermont Writing Collaborative, 2015).

READ 180 Universal embraces the reciprocal relationship between reading and writing and provides the rigorous writing instruction that is necessary for students to become proficient readers and writers. Based on the research of Dr. Steve Graham and Dr. Karen Harris, **students** learn a process to successfully plan, organize, and write (POW) responses to text. Students have multiple opportunities to write narrative, informative, and argument pieces, and they learn, practice, and apply strategies specific to each of these genres.

In addition to a strategy that will guide them through the writing process, students will learn genre-specific strategies to use as they plan and write narrative, informative, and argument pieces.

In narrative writing, students learn, practice, and apply the WWW+2¹ strategy; in informative writing, students learn, practice, and apply the TIDE² strategy; and in argument writing, students learn, practice, and apply the TREE³ strategy.

Throughout Whole- and Small-Group Learning, *READ 180* Universal writing instruction emphasizes writing with a purpose and writing that **develops content knowledge and reading skills**. These purposeful writing activities, and the associated discussions, help students to log the "miles on the tongue" that Dr. Kate Kinsella has found is vitally important to language development for English learners. *READ 180* Universal writing instruction provides carefully guided opportunities for students to **engage in many different types of**

Writing Effective Introductions

A PRINTING AND PRINTING

READ 180 Universal systematically scaffolds the writing process to explore and extend students' knowledge.

writing, from simple sentences to multi-paragraph essays. In paragraph-length constructed response writings and multi-paragraph essays, students follow the steps of the writing process: planning writing, organizing ideas using graphic organizers, composing a draft, and revising for clarity, conventions, and purpose. Writing is then shared through peer feedback and a variety of publishing opportunities. This systematically scaffolded writing process helps students explore and extend their knowledge through writing and guides them in clearly conveying ideas using academic language.

Throughout *READ 180* Universal, grammar, usage, and mechanics are taught systematically and in context in accordance with the research of Dr. Kate Kinsella. Analyzing and evaluating a model paper before writing helps make expectations transparent and aids struggling writers in visualizing the demands of the assignment. After writing, students use the routines they are taught during Whole-Group and Small-Group Learning to read, score, and respond to a partner's writing. These multiple opportunities for feedback provide the support that students—including English learners and students with disabilities—need to **gain confidence and independence with English grammar** and writing for academic purposes.

In the Student Application (Student App), the **Writing Zone** engages students in writing activities at appropriate levels of complexity with the supports and scaffolds they need in order to be successful writers. Students practice the WWW+2, TIDE, and TREE strategies and receive the scaffolds, including sentence frames, sentence starters, and graphic organizers, that are most appropriate to their writing levels. They receive **immediate personalized feedback** in addition to the more detailed feedback provided by peers and their teachers.

¹ WWW+2 refers to Who, When, Where, What, How.

² TIDE refers to Thesis Statement, Idea, Details, Ending.

³ TREE refers to Topic Sentence, Research, Evidence, Ending.

MINDSET AND SELF-EFFICACY

Students' academic mindsets play an important role in making them more engaged in learning, more resilient in the face of setbacks, and more academically successful. A report by the University of Chicago Consortium on Chicago School Research (CCCR) defined four important beliefs that make up academic mindset: a sense of belonging, self-efficacy, relevance/purpose, and growth mindset (Farrington et al., 2012).

Growth mindset is the belief that through effort and perseverance one can become better at something. Engagement, motivation, choice, ownership, and a growth mindset are intimately related (Dweck, 2007; Glei, 2013).

There have been numerous additions to the growth mindset literature in recent years (Blackwell et al., 2007; Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009; Yeager, Walton, Ritter, & Dweck, 2013). The Blackwell et al. (2007) study found that after eight growth mindset sessions in which students learned that intelligence can change over time, the students outperformed a control group on grade point averages. Additionally, a study by Greenleaf et al. (2011) found similar results for interventions focusing on academic behaviors.

Skills such as **perseverance**, **curiosity**, **conscientiousness**, **optimism**, **and self-control** instill growth mindset and grit in



Mindset Scans in *READ 180* Universal measure student beliefs about reading and intelligence.

students, allowing them to continue to try. These skills have more to do with character than with cognition and should be taught alongside daily curricular instruction (Tough, 2012).

Self-efficacy in the academic realm is the belief and confidence that one has in regard to his or her capacity to accomplish meaningful learning tasks and produce the desired results (Brozo & Flynn, 2008).

Perseverance refers to the tendency to pursue long-term goals with sustained effort and hard work. It has been shown to predict achievement in academic and vocational domains (Duckworth, Quinn, & Seligman, 2009; Duckworth & Quinn, 2009).

Executive function describes students' ability to control their cognitive processes including planning, organizing, reasoning, and working memory. Students with strong executive function abilities are able to control the many different processes that lead to successful reading comprehension. Measures of executive function are highly correlated to measures of growth mindset, self-efficacy, and reading achievement (Miller et al., 2014).

Students who have an easier time learning to read tend to use metacognitive awareness as they are reading to think about what they are doing and to adjust the strategies they use accordingly. Some metacognitive strategies that foster reading growth include: setting goals while reading; regulating progress; and employing mastery-oriented strategies in order to reach comprehension goals (Molden & Dweck, 2006; Pressley & Afflerbach, 1995). These strategies assist struggling students in realizing that their reading abilities are fluid—not fixed. It encourages them to persist in the face of difficulty and avoid becoming convinced that they are "bad" readers.

While brief interventions can prove successful at helping students establish a growth mindset, more **lasting change can be effected through daily activities** that reinforce the importance of growth mindset. Schools and classrooms that reinforce growth mindset messaging place the focus on learning rather than performance and make learning more enjoyable for students (Yeager, Paunesku, Walton, & Dweck, 2013).

READ 180 Universal develops academic mindset and behaviors as well as executive function, and encourages learning strategies critical for success in college and career. Building on existing structures that instill a sense of belonging, self-efficacy, and purpose, READ 180 Universal adds a focus on growth mindset. This focus helps to **build students' knowledge of growth mindset and increase their awareness of their own mindsets.** READ 180 Universal also helps teachers internalize and operationalize growth mindset for themselves and their students. Additionally, the program supports students and teachers in making connections between their academic mindsets, behaviors, and performances over time.

Growth mindset is integrated into *READ 180* Universal using five principles, which reach across program components (Whole- and Small-Group Learning, Student App, and Independent Reading):

- Teach how the brain changes learning and how focus and effort can lead to academic success.
- Build a growth mindset classroom culture where students and teachers have the language to talk about academic mindsets and behaviors.
- Communicate feedback that focuses on process, not abilities.
- Model and teach positive learning behaviors.
- Illuminate connections between mindset, behavior, and performance.

During the first two weeks of *READ 180* Universal, teachers and students begin to build their academic community with the Getting Started Workshop. In these lessons, students investigate **what it means to have a growth mindset** and experience how the brain changes with learning in an Anchor Video. They set goals for the school year and beyond and learn about other *READ 180* students that struggled academically, but continued to work hard with effort and focus until they were able to achieve their goals. This Workshop helps students understand their own mindsets and how they can "build their brains" with positive learning behaviors. The concept of a

fixed versus growth mindset is introduced from the very beginning of the year, so students and teachers have language to discuss mindset and behavior. They can work together to overcome challenges with effort and perseverance.

Throughout the course of *READ 180* Universal, students **cultivate a growth mindset** by approaching learning tasks with perseverance. The gradual release approach used in all *READ 180* Universal instruction **ensures that students gain confidence** as they move from full support to independent work, taking on increased responsibility for their own learning.

The *READ 180* Universal Student App also reflects important principles of **engagement and motivation**—critical for struggling readers. Students can track their progress toward and mastery of reading skills through the Student Dashboard. Monitoring their progress will **build students' self-efficacy** as they witness their growth and progress through *READ 180* Universal. The Student Dashboard acts as a powerful motivator for students, as they are able to track their own progress, celebrate their achievements, and take ownership. By empowering students to drive their own learning, students will develop executive function skills that will serve them in the classroom and beyond.

The Student App provides patient encouragement to students, along with immediate individualized feedback that can be particularly beneficial to English learners and students with disabilities. Universal design principles in the technology bolster the confidence of English Language Learners (ELLs) and students with disabilities. Additionally, first language support features augment the learning process for ELLs. This access to information about their progress and achievements not only motivates students, but also builds their awareness of who they are as learners, and guides them in setting and working toward academic goals.

SOCIAL-EMOTIONAL LEARNING

Social and emotional learning (SEL) is the process by which students develop the knowledge, attitudes, and skills needed to understand and manage emotions, set and achieve goals, feel and show empathy for others, maintain positive relationships, and make responsible decisions (Collaborative for Academic, Social, and Emotional Learning, 2014).

Five of the SEL core competencies are self-awareness (the ability to accurately recognize one's emotions and thoughts and their influence on behavior); self-regulation (managing one's emotions, thoughts, and behaviors effectively in different situations); social awareness (taking the perspective of and empathizing with others from diverse backgrounds and cultures while recognizing social and ethical norms for behavior); relationship skills (establishing and maintaining healthy and rewarding relationships with diverse individuals and groups); and responsible decision making (making constructive and respectful choices about personal behavior and social interactions based on ethical standards and the well-being of self and others) (CASEL, 2014).

Some of the **SEL factors** that improve success in school include having self-discipline, motivating one's self, managing stress, and organizing one's approach to learning more (Duckworth & Seligman, 2005).

Self-regulation is another component of SEL that has been linked to academic achievement. Students who display this aspect of SEL try harder and have more persistence in the face of challenges (Aronson et al., 2002).

Three decades of research covered in a meta-analysis of 213 SEL programs found that **SEL interventions increased students' academic performance by 11 percentile points** over students who did not participate in SEL programs. The SEL programs also reduced aggression and emotional distress, increased helping behaviors, and improved positive attitudes toward one's self and others (Durlak et al., 2011).

Social-emotional learning in schools can be just as, if not even more, essential than academic learning for putting students on a path to positive developmental and life outcomes. A study conducted by the Center for Benefit-Cost Studies of Education at Columbia University's Teachers College found that schools that invest in social-emotional learning programs experience a **return on their investment** of \$11 for every dollar spent. In addition to improvements in grades, attendance, and performance in core subjects, other benefits from social-emotional learning programs include reductions in aggression, substance abuse, delinquency, depression, and anxiety (Belfield et al., 2015).

The content organized within *READ 180* Universal's Knowledge Map reinforces and provides examples of the importance of managing emotions, setting and working to achieve goals, showing empathy for others, maintaining positive relationships, and making responsible decisions.

Within the Student Application (Student App) and Independent Reading, students read texts that inspire them to consider others through new perspectives. The messages and feedback delivered by the "Smart Coach" in Student App encourage students to persevere and achieve goals, make responsible decisions, regulate their thoughts and behaviors, manage stress, and organize their approach to learning.

The Student Dashboard within Student App allows students to set goals, regulate their progress, and motivate themselves toward achieving their goals.

The Independent Reading Library includes a number of titles that promote healthy social and emotional traits. The books help students

build social awareness by encouraging them to feel and show empathy for others from diverse backgrounds and cultures. They also demonstrate positive relationship skills, such as seeking out healthy and rewarding relationships with diverse individuals and responsible decision making such as making constructive and respectful choices about actions and behavior.

During the Getting Started Workshop, completed during the first two weeks of the school year, students set goals for each of the *READ 180* Universal rotations and learn tips to help them achieve those goals. These goals are revisited throughout the school year **to help the students become self-motivated and self-regulated in achieving their goals.** Students gain social awareness through reading stories and watching videos about other people who have faced and overcome challenges. The activities that students complete during this Workshop help them to become aware of their own thoughts and emotions and how they can control them to "do a 180," rewrite their own stories, and put themselves on a path to college and career success.

■ The Independent Reading Library Books



MULTI-TIERED SYSTEM OF SUPPORTS

To support students' academic, behavioral, and social needs, many schools have adopted multi-tiered models of intervention. Because Tier 3 interventions are costly in terms of time and resources, schools must find efficient and effective Tier 2 interventions prior to providing such intense supports (Bruhn, Hirsch, Gorsh, & Hannan, 2014).

Utilizing a Multi-tiered System of Supports (MTSS) creates a coherent continuum of evidence-based, system-wide practices that support a rapid response to the academic and behavioral needs of students. Within MTSS, there is frequent data-based monitoring to inform instructional decision making so as to empower all students to achieve high standards (Kansas MTSS, 2008).

Positive Behavioral Interventions and Supports (PBIS) is a system that provides supports that increase in intensity, based on students' behavioral and social needs. The purpose of PBIS is to take a proactive approach to addressing school discipline by promoting positive behaviors school-wide, identifying problem behaviors early, and responding to and reducing those behaviors through research-based instruction and intervention (Stewart et al., 2007). At each level, key components of the model include clearly defined expectations explicitly taught to all students, opportunities for students to practice

the skills, reinforcement for students who meet expectations, and a system for monitoring student progress (Lane, Robertson, & Graham-Bailey, 2006; Sugai et al., 2000).

Schools that have a culture that includes PBIS are able to **establish the behavioral supports that are needed for all children** to achieve both social and academic success. These schools have demonstrated increased achievement on both academic and social measures (Cohen, Kincaid, & Childs, 2007).

Effective PBIS implementations can be found in schools and districts that:

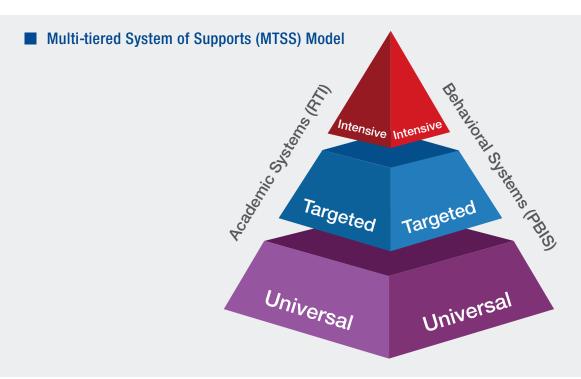
- Foster positive social interactions between students, teachers, and administrators
- Teach behavioral expectations in a socially- and ageappropriate way
- Reinforce positive behavior with methods that are targeted toward students
- Use implementation and student-level data to drive instruction and intervention (Bruhn, Hirsch, Gorsh, & Hannan, 2014)

READ 180 Universal can help educators meet the needs of students in both general education and special education through a Multi-Tiered System of Supports approach, which is a **systematic framework for allocating instructional services and resources** in response to students' individual academic and behavioral needs. As illustrated in the figure below, MTSS employs a multi-tiered model of service delivery to **promote efficient response to students' needs**. Each tier provides increasingly intensive support structure to ensure that students succeed.

The *READ 180* Universal instructional model supports multiple tiers by balancing whole-group instruction with small-group instruction that is targeted to different skills based on students' needs. During whole-group instruction, the teacher focuses on macro-level skills that all students need. Then, students break into small groups to address their individual needs through adaptive instructional software, leveled books, and small-group direct instruction in reading. While one

small group works on the Topic Software that continuously assesses and provides targeted instruction, another group reads paperbacks and eReads independently at the appropriate reading level based on the Lexile Framework® for Reading. This instructional model allows teachers to work with a chosen small group to address individual needs based on assessment data.

The PBIS model, which is incorporated throughout *READ 180*Universal, provides embedded supports and procedures for increasing student engagement, promoting positive behaviors, and motivating students to succeed. Instructional routines such as Oral Cloze, Think (Write)-Pair-Share, Idea Wave, numbered heads, and peer feedback encourage students to engage with the material with scaffolds that structure and support their responses. The instructional routines help to create a learning environment in which students can actively participate in a non-threatening and flexible way.



DIFFERENTIATED INSTRUCTION FOR STRUGGLING STUDENTS

There has been a call for **more instruction in higher-level reading skills** for adolescents and for professional development for teachers due to the realities of student reading difficulties and teacher lack of preparedness. This has raised serious consideration around the support that needs to be given to struggling readers and the role that teachers play in working toward higher levels of literacy among students (Kamil, Borman, Dole, Kral, Salinger, Torgesen, 2008).

Response to Intervention (RTI) is a multi level system for maximizing student achievement by integrating ongoing assessment of student progress with increasingly intensive intervention (National Center on Response to Intervention, 2010). RTI organizes intervention into multiple tiers of support for students not making adequate progress (Feldman, 2009). In all tiers of intervention, students benefit from teachers' use of data to determine whether students are making the desired academic gains, and then whether they need modifications in their curricula, materials, or instruction (Duffy, 2008; Fuchs, L.S., & Fuchs, D., 2007).

The What Works Clearinghouse identified five recommendations to assist educators in providing appropriate instruction for struggling students: 1) Screen all students for potential reading problems at the beginning and middle of the year; 2) Provide time for differentiated reading instruction for all students based on assessments of students'

current reading level; 3) Provide intensive, systematic instruction on up to three foundational reading skills in small groups to students who score below the benchmark score on universal screening; 4) Monitor the progress of Tier 2 students at least once a month; and 5) Provide intensive instruction on a daily basis that promotes the development of the various components of reading proficiency to students who show minimal progress after reasonable time in Tier 2 small-group instruction (Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008).

Within the RTI framework, districts can assist students in transitioning to college-and career-ready standards. The focus of an RTI approach supports diverse learners in accessing and meeting rigorous state standards (McInterney & Elledge, 2013).

Parental involvement is an important part of the RTI model. Schools that implement RTI provide parents with information about their child's progress, the instruction and interventions used, the teachers and staff who are providing the intervention, and the academic and/ or behavioral goals for their child (National Center for Learning Disabilities, 2015).

READ 180 Universal is a Tier 2 intervention that offers powerful tools for the **systematic screening and progress monitoring** that are central to an RTI approach, along with customizable training and professional development to ensure that teachers can use the program with a wide array of students.

The Reading Inventory serves as a screening assessment in the beginning of the year to determine students' reading level and place them at the appropriate level in Student Application (Student App). *The Reading Inventory* can then be administered multiple times over the year as a progress-monitoring tool—an essential component of an RTI approach.

For additional progress monitoring, *READ 180* Universal provides a variety of curriculum-embedded, criterion-referenced assessments, including passages for **oral reading fluency assessment** and Workshop Assessments, to regularly track student progress. Workshop Assessments are administered both in the middle of and after every *ReaL Book* Workshop to assess students' mastery of comprehension and writing skills taught during Whole- and Small-Group Learning. These assessments can be used by teachers to inform future individual and Small-Group instruction.

In Student App, **continuous targeted diagnostic assessments check for mastery of skills and identify individual instructional needs**. The grouping tool on the Teacher Dashboard groups

students according to their specific needs identified through ongoing assessment, allowing teachers to easily and efficiently plan differentiated instruction and intervention.

READ 180 offers a wealth of resources for differentiating and adapting instruction based on students' needs. Student App provides individualized instruction, along with immediate personalized feedback accompanied by modeling and guided practice. By constantly collecting ongoing data about student performance, Student App provides critical information for teachers about student progress and individual needs. The Teacher Dashboard then allows teachers to efficiently group students according to their needs for targeted follow-up instruction, while the Student Dashboard encourages students to take ownership over their own learning.

From its inception, *READ 180* Universal was designed to address the needs of struggling readers. The research behind the development of *READ 180*'s innovative software was initially funded by a grant from the U.S. Department of Education's Office of Special Education. Through **adaptive technology, individualized instruction, and high-interest materials**, *READ 180*'s comprehensive program provides the direct, systematic instruction necessary to effectively support struggling readers. The program also offers motivational support that improves student confidence and attitudes toward reading and school.



Anchor Videos facilitate access to content for all students in READ 180 Universal.

DIFFERENTIATED INSTRUCTION FOR STUDENTS WITH DISABILITIES

Response to Intervention (RTI) is a multi level system for maximizing student achievement by integrating ongoing assessment of student progress with increasingly intensive intervention (National Center on Response to Intervention, 2010). RTI organizes intervention into multiple tiers of increasingly intense interventions for those students not making adequate progress in Tier 1 (Feldman, 2009). Tier 2 and 3 interventions are intensified by increasing instructional time, decreasing group size, matching materials to students' levels, modifying presentation modes, and providing corrective feedback.

RTI supports **progress monitoring** for all students. In all tiers of intervention, students benefit from teachers' use of data to determine whether students are making the desired academic gains, and then whether they need modifications in their curricula, materials, or instruction (Fuchs, L.S., & Fuchs, D., 2007; Duffy, 2008).

Collecting ongoing data on student progress is vital to documenting student growth, planning instruction, and determining the need for intervention (Fisher & Ivey, 2006; National Joint Committee on Learning Disabilities, 2008; Stecker, Fuchs, L. S., & Fuchs, D., 2005; Torgesen, 2002). Streamlining the regular collection and examination of data, as well as modifying instruction based on what is learned from student data, can benefit all students and can be a powerful tool to help make a teacher's job more efficient rather than more difficult (Duffy, 2008).

For **students with disabilities**, it is particularly important to use student performance assessment data to monitor progress in order to determine continuing instructional/remedial needs (National Joint Committee on Learning Disabilities, 2008).

Differentiated instruction meets students where they are—matching instruction to meet their assessed needs. Research demonstrates that differentiated instruction can significantly improve student achievement (Allan & Goddard, 2010). For students with disabilities, individually targeted instruction in reading skills can improve reading achievement, both in the targeted skill and in more generalized measures of literacy (Shanahan, 2008; Vaughn & Denton, 2008).

In a recent research synthesis by Wanzek and colleagues, strong evidence was found to support three **instructional recommendations for students with reading difficulties** in Grades 4 to 12: 1) Provide explicit vocabulary instruction; 2) Use direct and explicit comprehension strategy instruction; and 3) Provide struggling readers with intensive and individualized interventions. From this finding, the authors recommended intensive intervention efforts for students with reading difficulties in Grades 4 through 12 who do not perform at or near grade level, and supplemental, small-group instruction for extended periods of time (Wanzek, Vaughn, Scammacca, Metz, Murray, Roberts, & Danielson, 2013).

Teachers who rely mostly on whole-group instruction do not adequately meet the individual needs of students who need extra literacy support. Instead, teachers can use performance data to form small groups of students and teach lessons to **target their specific skill** needs. Students with disabilities particularly benefit from this type of targeted intensive instruction in small and flexible groups (Avalos, 2006).

Positive Behavioral Interventions and Supports (PBIS) models provide clearly defined expectations explicitly taught to all students, opportunity for students to practice the skills, reinforcement for students who meet expectations, and a system for monitoring student progress (Lane, Robertson, & Graham-Bailey, 2006; Sugai & Horner, 2002). PBIS models have been found to be particularly effective in helping students with emotional and behavioral challenges stay on track and experience success (Sugai, Sprague, & Horner, 1999).

READ 180 Universal can help educators meet the needs of students with disabilities through a Response to Intervention (RTI) approach, which is a **systematic framework for allocating instructional services** and resources in response to students' individual needs. An RTI framework employs a multi-tiered model of service delivery to promote efficient response to students' needs. Each tier provides increasingly intensive support structure to ensure that students succeed.

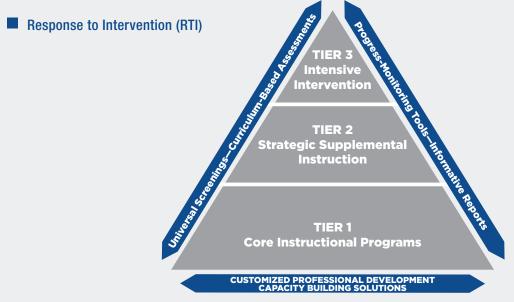
The *READ 180* Universal instructional model supports multiple tiers by balancing whole-group instruction with small-group instruction that is targeted to different skills based on students' needs. During whole-group instruction, the teacher focuses on macro-level skills that all students need. Then, students break into small groups to address their individual needs through adaptive instructional Software, leveled books, and small-group direct instruction in reading, writing, language development, and comprehension. While one small group works on the Topic Software that continuously assesses and provides **targeted instruction**, another group reads paperbacks, eReads, eBooks, and listens to audio books independently at the appropriate reading level based on the Lexile® Framework for Reading. This instructional model allows teachers to group students to address individual needs based on assessment data.

The **READ 180** Universal software offers powerful tools for the

systematic screening and progress monitoring that are central to an RTI approach, along with customizable training and professional development to ensure that teachers can use the program with a wide array of students, including students with disabilities.

Independent Reading eBooks and eReads provide numerous supports to help students with disabilities as they read independently. **Those supports include a text-to-speech feature, a zoom feature, a digital dictionary, and a highlighting** feature. In addtion, Audiobooks feature a reading coach, a narrator who provides comprehension strategies and models fluent reading respectively. During Independent Reading, students may also express their learning through book conferences with the teacher, and collaboration and presentation projects.

Following a **Multi-tiered System of Supports (MTSS) model**,
Positive Behavioral Intervention and Supports (PBIS) and RTI are integrated throughout *READ 180* Universal to provide embedded procedures for increasing student engagement, promoting positive behaviors, and motivating students to succeed. Instructional routines such as Oral Cloze, Think (Write)-Pair-Share, and peer feedback encourage students to engage with the material with scaffolds that structure and support their responses. The instructional routines help to create a learning environment in which students can actively participate in a non threatening and flexible way.



DIFFERENTIATED INSTRUCTION FOR ENGLISH LANGUAGE LEARNERS

The number of English learners in schools has grown by over 50% in the past decade. Current estimations of English learners in schools are 5.3 million students, a significant amount. While this has brought challenges to meeting the needs of these students, it has also brought an opportunity to embrace multicultural and multilingual education and an increased focus on improving instruction for English learners (George Washington University Center for Equity and Excellence in Education, 2009).

The proportion of English learners that live in California is approximately 34% of the national total, and California has more English learners than the next six states combined. Approximately 25% of California's students are English learners. English learners must meet the same challenging standards as native speakers of English, and many are at risk in US schools, which typically do not successfully differentiate instruction to meet their unique and varied needs (California Department of Education, 2010).

A recent review of best practices for "Teaching Academic Content and Literacy to English Learners in Elementary and Middle School" conducted by the Institute of Education Sciences resulted in four recommendations:

- Teach a set of academic vocabulary words intensively across several days using a variety of instructional activities.
- Integrate oral and written English language instruction into content-area teaching.
- Provide regular, structured opportunities to develop written language skills.
- Provide small-group instructional intervention to students struggling in areas of literacy and English language development (Baker et al., 2014).

The research on **effective instruction** for English learners points to three important principles: generally effective practices are likely to be effective with English learners; English learners require additional instructional supports; and the home language can be used to promote academic development. Additionally, English learners need plenty of opportunities to develop proficiency in English (Goldenberg, 2013).

In a study of high-performing schools with large populations of English learners, four broad, effective practices were identified as having the most significant positive correlation with high test scores: implementing a coherent, standards-based curriculum and instructional program; prioritizing student achievement; ensuring availability of instructional resources; and using assessment data to improve student achievement and instruction (Williams, Hakuta, Haertel et al., 2007).

For **mixed-ability classes** including English learners, providing explicit, interactive instruction results in the greatest text comprehension gains, especially when the instruction relates the academic vocabulary words in the text to focal lesson concepts or when the words have general use in academic contexts (Kinsella, 2013).

Students need to be reading not only deeply but widely and building their vocabulary and knowledge (Beck, McKeown, & Kucan, 2002; Feldman & Kinsella, 2005). Wide reading is particularly important for English learners, who benefit from learning word meanings in context rather than as separate lists of words (Au, 1993).

Because **academic language proficiency** is related to achievement in reading and writing, direct instruction in oral and written academic language for English learners is critical (Biancarosa & Snow, 2004; Gersten & Baker, 2000). For example, teaching vocabulary and grammar as it is used in specific genres prepares English learners to succeed with academic writing tasks (Schleppegrell, 1998).

In a sense, all students are English learners, as they all come to school with different experiences and levels of exposure to the English language. *READ 180* Universal is **designed to differentiate instruction and meet all English learners at their levels**, whether they are speakers of other languages or other dialects such as nonstandard English, while being respectful of their first language. *READ 180* Universal helps teachers to capitalize on the advantages that English learners bring to the classroom and the support that using their first language judiciously can provide. By focusing on understanding register and academic language, the program helps students build upon their native languages and dialects and provides them the scaffolding and supports they need to "put miles on the

Throughout *READ 180* Universal, program materials reflect a consideration for the needs of English learners. The program was designed with the recognition that focusing on the needs of English learners highlights important elements of reading instruction, such as **building background knowledge and developing academic vocabulary**, that are beneficial to all *READ 180* Universal users.

tongue" and use academic language effectively.

THE ACADEMIC DISCUSSION ROUTINE IN ACTION

Read an example of a Model Lesson that incorporates this routine.

Set Expectations

- Explain the steps of the Academic Discussion routine.

- Review the "4 Ls of Productive Partnering."

Use the Academic Discussion routine to engage students as they talk about their prior knowledge of a text or answer a question. Interacting effectively during conversations is important in letting your classmates know you are listening to them.

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Scaffolded instructional routines in *READ 180* Universal facilitate robust academic discussions.

READ 180 Universal includes many supports that are beneficial to English learners who are struggling with reading comprehension and fluency. All English learners can benefit from the individualized instruction provided by Individualized Learning Technology, along with immediate corrective feedback that has been found to be particularly helpful to non-native English speakers. Student Application (Student App) also provides vocabulary supports, captioning of Anchor Videos, supports in the eReads and parent materials for five major world languages spoken in California (Spanish, Vietnamese, Filipino, Cantonese, and Mandarin), and Spanish translations that can help students with beginning and intermediate English proficiency levels access the texts, build background knowledge, and experience success.

The program's emphasis on developing academic language and vocabulary reflects practices that have been shown to be particularly effective for English learners, who may struggle with academic language even if they are comfortable with conversational English. Similarly, English learners benefit from supported practice with speaking and listening in the classroom and opportunities to collaborate and discuss concepts with peers. The program's instructional routines, such as Think (Write)-Pair-Share, scaffold classroom discussion so that English learners can feel more comfortable participating. Like native English speakers, English learners are able to apply and practice their learned skills with Audiobooks and independent reading books that are leveled so that students can experience frequent success with reading. In addition, students have the opportunity to practice their oral language skills during independent reading book conferences and **collaboration and presentation** projects. Projects are assigned at the teacher's direction and may include debates, research projects, multimedia presentations, choral reading, writing dialogue, and more. The multicultural content found across all components of READ 180 Universal reflects ethnic, cultural, and linguistic diversity, helping English learners find a sense of belonging in their new culturally responsive environment.

FAMILY ENGAGEMENT

In order for a child to be successful in school, there are numerous **critical roles that families play:** supporters of learning, encouragers of perseverance and determination, models of educational practices, and advocates of appropriate school environments for their child. Families need the opportunity to learn and grow along with their children and support the learning and growth of their children in order for partnerships between families and schools to succeed (Mapp & Kuttner, 2014).

Schools and districts that **successfully engage families in their children's learning** are able to strike a balance between pushing families to support learning and pulling the families into the school community. These schools view families as partners in their children's education and provide a collaborative environment that builds relationships between educators and families. They have frameworks that encourage both learning at home and collaborative decision making (Henderson, Mapp, Johnson, & Davies, 2007).

Having **books in the home** helps establish a reading culture that continues from generation to generation within families and is independent of education and class. This creates an interest in and

desire for books that will promote the skills and knowledge needed to foster both literacy and numeracy, thus leading to lifelong academic advantages (Evans et al., 2010).

Children whose parents have lots of books are nearly 20% more likely to finish college. Books in the home are a stronger predictor of college graduation than the educational levels of the parents (Evans et al., 2010).

It is very important that families and educators make a firm commitment to **encourage adolescent students to read** outside of school by finding ways to engage them with texts over the summer, as well as before and after school. Moreover, it is critical that we encourage them to make reading a part of their lifestyle (Alexander, 2014).

For a child to become a reader, **time spent with parents** or caregivers who engage with their children with books—whether through close readings or discussion of pictures—is what is most necessary. When children not only have access to books but can also share them with reading mentors who love books and reading, they are much more likely to thrive as readers (Heath, 1983; Bridges, 2014).

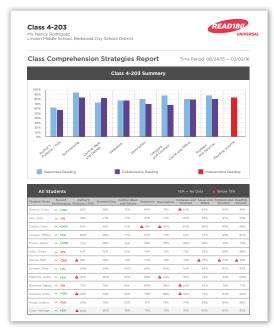
READ 180 Universal provides resources to help families support students' learning and connect with the READ 180 Universal classroom. Families and caregivers can go online to the Family Portal to learn about READ 180 Universal instruction and materials. The site includes a video, 60 Seconds to School Success, providing tips for families about how to support their children's literacy achievement, and offers links to additional resources and research to help caregivers understand the needs of struggling readers. In addition, the Family Portal provides a space for sharing success stories and experiences with teachers and other READ 180 Universal families.

Each *ReaL Book* Workshop includes four or five **strategies to support teachers in involving and engaging parents**, including:

- Strategies for soliciting and hearing the concerns, hopes, needs, and insights of parents
- Suggestions for sharing expectations about parent involvement and asking parents about their expectations

- Channels for asking parents what they view as important in helping students succeed and adding those things to classroom practice
- Frequent communications with parents and families (via email, letters, and suggestions for school websites)
- Invitations for **parent volunteers**
- Information on supporting Real Book work at home while helping students build independence
- Information on classroom assignments and the role of homework in reinforcing class discussion/learning

These strategies are available in the Teacher's Edition throughout the texts and during process writing instruction. Parent reports of student progress as well as letters to parents are available in multiple languages. Access to digital books helps students engage with their families over texts.



PROFESSIONAL LEARNING COMMUNITIES

With an emphasis on **teachers as critical players** in enhancing student achievement, developing strong professional learning communities plays a big role in improving educational outcomes. Professional Learning Communities add to teacher quality in the following ways (NCTE, 2010):

- Linking research and practice
- Creating space for addressing problems of practice
- Increasing teacher retention
- Uniting pedagogical and disciplinary knowledge
- Fostering transformative teaching
- Enhancing student learning

Educational research has a more direct effect on **teacher practices** when teachers can see its relevance to their daily practice in the classroom. Professional learning communities allow members to actively seek and carry out research that addresses group concerns and to reflect on the research as a community (Vanderlinde & vanBraak, 2010).

Focusing on a community of teachers' inquiry into questions about instruction and **students' learning deepens teachers' understanding of** student learning and allows the collective capacity of the community to address instructional dilemmas (Webb, Vulliamy, Anneli, Hamalainen, & Polkionen, 2009).

Professional learning communities encourage transformative learning as participants with varying backgrounds, expertise, and experience are able to offer multiple perspectives on classroom practice. All participants are contributors in working toward more creative and effective methods of teaching every unique student (Barab, Barnett, & Squire, 2002).

By participating in learning communities, educators are more likely to understand and demonstrate the kind of **lifelong learning** that they desire for their students. The awareness about learning that comes from participating in a learning community creates connections between assessment and instruction for both teachers and learners (Birenbaum, Kimron, Shilton, & Shahaf-Barzilay, 2009).

READ 180 Universal provides resources to **help teachers and families support students' learning** and connect with the **READ 180** Universal classroom on a personalized and national
level. The Educator Community site gives **READ 180** teachers the
opportunity to find helpful resources, connect with other **READ 180**professionals, and engage in professional learning. The site is located
at hmhco.com/educatorcommunity. This is a one-stop shop for **READ 180** teachers to download classroom resources, ask questions,
read about relevant topics and best practices from our expert teacher
bloggers, and watch professional learning videos on a range of topics.

Having a community space for educators and families is extremely important for educational development, as teachers and parents are provided with a professional forum to discuss student progress, look for evidence of student thinking, identify common errors, and discuss how to better facilitate learning experiences.

Ever mindful of the critical role of parents in their children's education, we consider parents as powerful members of professional learning communities. Each *Real Book* Workshop includes several **strategies to support teachers in involving and engaging parents**. These

strategies include soliciting feedback, sharing expectations, parent/caregiver volunteer opportunities, and ongoing communication. In addition, *READ 180* Universal provides information for parents on supporting students, *ReaL Book* work at home including helpful tips on the role of homework in reinforcing students learning.

These strategies are available in the Teachers Edition at the Workshop Launch, throughout the texts, during process writing instruction, and at the Workshop close. Parent reports of student progress as well as letters to parents are available in multiple languages. Access to digital books helps students engage with their families over texts.

Families and caregivers can go online to the Family Portal to learn about *READ 180* Universal. As described previously, the site includes a video, *60 Seconds to School Success*, providing tips for families about how to support their children's literacy achievement, and offers links to additional resources and research to **help caregivers understand the needs of struggling readers**. In addition, the Family Portal provides a space for sharing success stories and experiences with teachers and other *READ 180* Universal families.



Educators can connect and share resources on the *READ 180* Community site (hmhco.com/educatorcommunity).

PERSONALIZED INSTRUCTION WITH ADAPTIVE TECHNOLOGY

Well-designed blended learning solutions offer many positive benefits for students, especially for struggling students. Five aspects of technology that can be game changers for students are that it is:

- 1. Adaptive
- 2. Effective at facilitating practice that leads to mastery
- 3. Available anytime and anywhere
- 4. Effective at gathering and processing data
- 5. Motivating (Hasselbring, 2012)

Adaptive technology harnesses Universal Design for Learning

(UDL) principles in that it provides a flexible design from the start that has customizable options. This flexibility allows all learners to progress from where they are and not where we would have imagined them to be. In this way, all learners are provided with instruction that is varied and robust enough to be effective (CAST, 2011).

The motivating potential of technology, especially for struggling students, is very promising. For almost everyone, especially students caught in a cycle of failure, success is a tremendous motivator. Many technology-based programs are able to process data and point out improvements in even very small increments. Seeing these improvements is incredibly motivating for students who feel they have never experienced success in school (Hasselbring & Bausch, 2005).

Adaptive technology affords students the opportunity to receive individualized support, learn at their own pace, and receive corrective feedback in real time (Kamil, 2003). Individually targeted instruction in reading skills can improve reading achievement, both in the targeted skill and in more generalized measures of literacy (Shanahan, 2008; Vaughn & Denton, 2008).

Many **technology-based programs** allow teachers to look up the day-to-day progress of students, see which concepts are holding them back, and then use that information to create an individualized learning plan. When a student spends just a small amount of time using the right kind of software, technology-based programs can quickly assess the student's skill set, organize the data, and deliver customized data to the teacher, parent, or student (Hasselbring, 2010). A recent report (RAND, 2014) found that students in charter schools that had implemented personalized learning programs improved in reading and math over the national average on standardized tests.

A recent report from the Stanford Center for Opportunity Policy in Education (SCOPE) cited three factors that affect the achievement of at-risk adolescent students that use educational technology: the **interactive nature of the technology**, the ability of the technology to encourage students to explore and create rather than repetitively practice skills, and effective interaction between teachers and the technology (Darling-Hammond, Zielezinski, & Goldman, 2014).

READ 180 Universal's innovative technology harnesses learning theory and pedagogical principles to deliver individualized and personalized instruction tailored to each student's needs and interests. The adaptive technology embedded into the Student Application (Student App) customizes and scaffolds individual practice and application of word recognition, spelling, vocabulary, language, fluency, comprehension, and writing skills. The adaptive pacing of skills practice in the Student App helps students achieve automaticity, freeing cognitive capacity for higher-order processes. In addition, embedded assessments throughout the Student App are designed to continuously assess and place students according to their levels of mastery of learned and new information, and to customize corrective feedback to students' specific errors.

The power of *READ 180* Universal's technology is that it enables the program to assess student knowledge and skills, respond to individual student differences, differentiate and scaffold instruction, provide corrective feedback, monitor student progress, and offer teachers

data to guide students to become proficient readers and learners.

These characteristics constitute instructional practices that have been shown to be highly beneficial to struggling readers, students with disabilities, and English learners.

READ 180 Universal builds a Learner Profile that takes into consideration the students' mastery of academic skills (measured through their performance on reading comprehension, fluency, word recognition, language/vocabulary, spelling, and writing activities) as well as their academic mindset (measured through their usage and activity in the Student App and help-seeking and challenge-seeking behaviors). The Learner Profile is informed by the FASTT algorithm to consistently provide students with instruction and practice on skills and strategies within their zone of proximal development. In addition, advances in speech recognition technology enable the Student App to monitor their behaviors and provide feedback to ensure that students stay on task.



The READ 180 Universal Student App delivers personalized instruction tailored to each student's needs and interests.

BLENDED LEARNING SOLUTIONS

Blended learning can be described both as a formal education program in which a student learns through online delivery of content and instruction while having some control over time, place, path, and/or pace, and as a supervised education program that occurs in a "brick-and-mortar" location (Staker & Horn, 2012).

Providing a **fundamental redesign of instructional models**, blended learning seeks to accelerate learning toward college and career readiness. The goal is to develop schools that are more productive for both students and teachers by personalizing instruction. In this way, blended learning can ensure that the most appropriate resources and interventions are available for students at the time that they need them (Bailey, Ellis, Schneider, & Vander Ark, 2013).

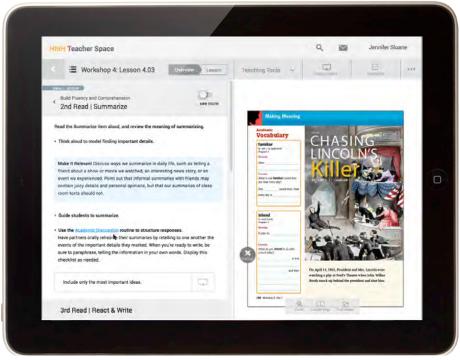
Blended learning has the potential to **bring accessibility, affordability, and customization** that might have previously been complicated, expensive, and standardized to educational places. In this way, it can transform learning experiences for students (Staker et al., 2011).

Blended learning that integrates face-to-face and digital

learning can lead to greater educational equity, opportunities, and efficiencies for students. As we use technology and digital devices regularly in order to function in our personal and professional lives, it is reasonable to integrate these same resources into educational environments (Anderson & Skrzypchak, 2011).

Models of blended learning that follow a hybrid pattern build upon and offer sustaining enhancements to a regular classroom system while not disrupting it. Other models of blended learning that are more disruptive can transform the classroom system by becoming engines of change over the longer term (Horn & Staker, 2014).

In a membership survey of teachers from all fifty states, the Association of American Educators found that 92% of teachers report utilizing technology in the classroom and 68% of teachers "support a blended learning environment where students spend part of their day with a teacher and part of their day working with a computer" (Association of American Educators, 2015).



HMH Teacher Space provides access to real-time student-performance data.

HMH has embraced **a blended learning approach** to instruction since the first version of *READ 180* integrated technology was introduced in primary and secondary classrooms to support teachers' efforts to provide individualized, personalized, and differentiated instruction. As Margery Mayer, president of HMH Intervention Solutions Group, has said: "Everyone is in the blended learning space now, but back then we just felt that 'blended' was the most natural way to learn—technology to help and support where it makes sense. And it steps back and lets the teacher do what he or she does best as well."

All *READ 180* Universal teachers have access to HMH Teacher Space, which provides unprecedented **support for monitoring learning and differentiating instruction**—critical to effective intervention. Through HMH Teacher Space, the teacher can:

- Instantly access **real-time data** about student performance
- Analyze data and results to inform instruction
- Plan effective instruction
- Access guidance on reviewing and reteaching skills based on data
- Use the grouping tool to group students for differentiated instruction tailored to their needs
- Access rubrics and grade student performance on writing assignments and fluency readings
- Receive notifications that alert teachers to relevant and timely data points
- Access dynamic, daily Professional Learning resources
- Participate in a community of educators and access all resources through an educative curriculum

READ 180 Universal Student Application (Student App) complements the teacher-led Whole- and Small-Group Learning with activities that customize and scaffold individual skill practice. Students are able to **choose their path through the Student App** and work at their own pace, two factors that are critical to an effective blended learning program. Student App also continuously collects data about student performance and provides **continual personalized feedback** to the student, freeing the teacher to focus on targeted direct instruction for the Whole-Group and Small-Group Learning.

Other features of *READ 180* Universal technology also help teachers collect and manage data, providing them more time for **face-to-face teaching**. For example, the adaptive *The Reading Inventory* assessment screens students and provides a Lexile measure that teachers can use to efficiently match students with texts. This data not only provides a **personalized path** through the Student App, but also allows the teacher to differentiate instruction during Small-Group Learning.

ASSESSMENT OF AND FOR LEARNING

As **technological and learning advances** are increasingly being made, we are at the beginning of what is surely to be the most important, turbulent, and exciting decade in the century for innovations in assessment. Four major forces are pushing these innovations along: technological, social, and economic trends are changing the skills needed for citizenship and employment; the power of personal digital and computing devices and the number of people with daily access to them are increasing exponentially; cognitive science is creating new and powerful insights into how people learn; and the demand for K–12 education learning and assessment tools in the United States is reaching explosive levels that will spur greater investment and innovation (Doorey, 2012).

Effective assessments allow educators to make important claims about the knowledge and skills that students possess. Literacy assessments can enable educators to determine whether students can read and comprehend complex literary and informational texts, to determine whether they can write effectively when analyzing text, and to determine their overall literacy proficiency (Gendron, 2012).

Assessment systems can provide a balanced way to give teachers and schools the information and tools they need to improve teaching and learning so that all students leave high school ready for college and career. **Balanced assessment systems** include **formative** assessment practices that improve instruction; **interim** assessments that are flexible and open and are used for actionable feedback;

and **summative** assessments that are benchmarked to college and career readiness (Gendron, 2012).

Shepherd and Marzola (2011) found that teachers who incorporated **formative assessments** into their lessons increased student reading achievement scores more than teachers who did not use formative assessments. Chatterji, Koh, Choi, and Iyengar (2009) also found that their researcher-developed formative assessment, the Proximal Assessment for Learner Diagnosis (PALD), was effective for addressing learner needs and thus closing achievement gaps in subject-area domains.

While formative assessments are beneficial for all students, they are particularly helpful for struggling students as they highlight troublesome areas and provide guidance on what needs to be done to overcome them (Black & William, 2009).

Schools that embrace a **student-centered learning approach** emphasize instruction and assessment that help students connect with and apply what they are learning through culminating performance-based assessments. These schools utilize ongoing, performance-based assessments that focus on mastery. Student-centered schools are more likely to outperform peers on standardized assessments, graduate more students, help more students become eligible for college, and have students that persist in college (Friedlaender et al., 2014).



The Reading Inventory is a universal screener and progress monitoring assessment that places students appropriately into the program.

READ 180 Universal contains a comprehensive system to administer and give **actionable feedback** for both formative assessments (assessments for learning) and summative assessments (assessments of learning). The *READ 180* Universal assessment system provides ongoing information for students, teachers, and administrators throughout the year about student learning and progress.

READ 180 Universal assessments include tools to screen and place students, monitor progress, and provide information that can be used to **inform instruction**. READ 180 Universal teachers use The Reading Inventory, a scientifically based and validated test, as a **screening assessment** in the beginning of the year and as a **progress-monitoring assessment** in the middle and end of the year. The Reading Inventory Lexile measure is one of several data points that are used to inform the students' learner profiles. Other contributions to the learner profile include the students' interests, their engagement and motivation that are tracked through the Student Application (Student App), and their performance on the Workshop assessments, on HMH Reading Counts! independent reading quizzes, and in the Student App.

In addition to *The Reading Inventory, READ 180* Universal includes multiple formal and informal formative assessments to **monitor student** progress on an ongoing basis. Students can take Interim and End-of-Workshop Assessments during and after each of six Workshops to assess progress in using reading strategies for comprehension. These embedded assessments are designed to monitor progress and support instruction, and are aligned to core Reading and Language Arts Content Standrards. The tests include item formats that students will encounter on Next Generation assessments so that students will develop strategies for attacking these challenging formats and practice the kinds of thinking these items demand. Students may also take Summative Tests at midyear and end of year to assess listening and reading comprehension, critical reading, word-study skills, conventions, and writing. HMH Reading Counts! quizzes assess students' comprehension of Paperbacks, Audiobooks, and eReads that they complete during Independent Reading.

HMH Teacher Space provides a step-by-step process for formative assessments to take place during Small-Group Learning. This process makes it easy for teachers to quickly and effectively evaluate students and then review the data to inform their instruction. The process includes the following: teacher and tool activities alerting teachers to the lesson's goals, guiding students through the response activity that measures their performance, examining the Formative Assessment rubric, determining the mastery level of each student, giving options to adapt instruction, and quickly logging student performance level (There, Nearly There, Not Yet) with the formative assessment tracker.

Critical thinking and 21st century skills are assessed at the end of every Workshop, through Projects that assess students' abilities to apply 21st century skills such as analyzing information, using technology for communication, and engaging in collaborative work. Scoring guides are used to assess these projects, as well as writing assignments and the Respond & Write activities in the Writing Zone. These scoring guides support students and teachers in reviewing students' work, providing feedback, and revising as necessary.

Technology plays an important role in the *READ 180* Universal assessment system. *READ 180* Universal's **adaptive technology provides students with personalized feedback** and teachers with a powerful tool for progress monitoring as it continuously collects data on students' growth and mastery of new skills that feeds into the students' learner profiles. The Teacher and Leadership Dashboards provide easy access to data from these ongoing assessments, **allowing teachers and administrators to efficiently monitor student progress in real time**, quickly identify problems, and inform decision making about instruction.

All *READ 180* Universal students complete interim- and end-of-year **performance assessments** that take place after Workshop 3 and Workshop 6. These performance assessments are research projects in which the students choose a topic, research and evaluate sources, and use the process and strategies they have learned for informative writing to write a research paper.



EFFICACY STUDIES

For more than a decade, districts across the nation have successfully implemented *READ 180* in classes with struggling readers and have experienced great success in accelerating these students to gradelevel reading proficiency. In this section, we outline the research that has been conducted in the following districts:

- Effingham County Schools, GA
- KIPP NYC, NY
- Lodi Unified School District, CA
- Napa Valley Unified School District, CA
- Springfield and Chicopee Public Schools, MA

For more evidence of the efficacy of *READ 180* across the country, please see the *Compendium of READ 180 Research* or visit: hmhco.com/READ180.

■ EFFINGHAM COUNTY SCHOOLS, GA

Mixed-Model *READ 180* and *System 44* Middle School Students Outperform Nonparticipating Peers on Georgia Criterion-Referenced Competency Test. Evaluation Period: 2013–2014

Grades Included in Evaluation: 6–9

Assessment: Georgia Criterion-Referenced Competency Test (CRCT), *The Reading Inventory*

Participants: N=2,049

OVERVIEW

Effingham County Schools (ECS) includes 14 schools that serve 11,462 students in Grades Pre-K through 12. The mission of ECS is "to provide rigorous and relevant instruction in a safe environment to enable all students to obtain ... postsecondary success." Of the approximately 55,000 people who live in Effingham County, 83% are Caucasian, 14% are African American, and 3% are either Hispanic/Latino, Asian, or American Indian/Alaska Native.

In the 2013–2014 school year, ECS implemented *READ 180* Next Generation (NG) and *System 44* Next Generation (NG) in their sixth- through ninth-grade classrooms as part of a Response to Intervention (RTI) model. Students identified as readers struggling with comprehension were placed into *READ 180* NG, and students identified as readers struggling with foundational literacy skills were placed into *System 44* NG. The two programs were implemented together within classrooms as part of a multitiered, blended learning model.

All three middle schools in Effingham County participated in this study. In the *READ 180* NG program, there were 81 sixth-grade students, 87 seventh-grade students, 67 eighth-grade students, and 37 ninth-grade students for a total of 272 students included in the study. As part of a mixed-model intervention, students received *READ 180* NG Tier 2 or *System 44* NG Tier 3 instruction daily, for 75 minutes in one middle school and for 55 minutes in two middle schools.

RESULTS

Across the grades, students used the *READ 180* NG software an average of 28 hours over the year. An average of 94 sessions took place during this time, which resulted in the completion of 14 segments.

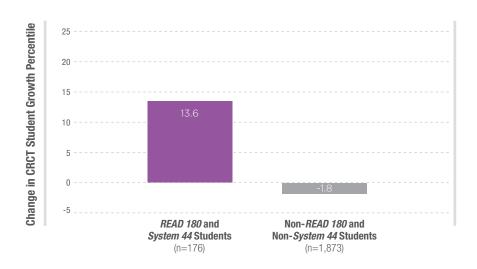
READ 180 NG and System 44 NG students outperformed their nonparticipating peers on the reading section of the Georgia Criterion-Referenced Competency Test (CRCT). Across the schools, 176 students enrolled in READ 180 NG or System 44 had an average SGP increase of 13.6 percentile points, whereas 1,873 non-READ 180 NG or System 44 students had an average SGP decrease of 1.8 points. See Graph 1.

Overall, *READ 180* NG students also experienced a significant average fall-to-spring Lexile gain of 148L on *The Reading Inventory*, with 77% of students exceeding average annual growth. Seventh and eighth graders had the greatest mean Lexile gains (168L for both, with 87% and 81% of students exceeding average annual growth, respectively), followed by ninth graders (128L, with 68% of students exceeding average annual growth) and sixth graders (128L, with 67% of students exceeding average annual growth). **See Graph 2**.

These results provide evidence that students who received *READ 180* NG instruction as part of a mixed-model intervention made significant improvements on both proximal measures of reading achievement such as *The Reading Inventory* and distal measures of reading achievement such as the Georgia CRCT Reading.

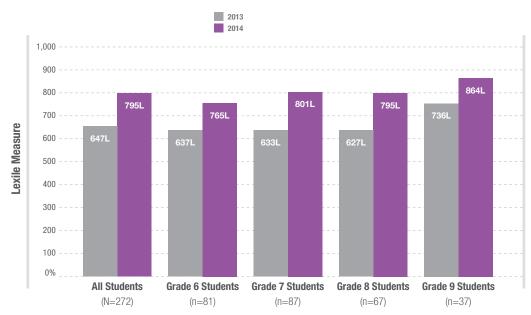
GRAPH 1

Effingham County Schools Students, Grades 6–8 (N=2,049) Georgia CRCT Student Growth Percentiles, 2013–2014



GRAPH 2

Effingham County Schools *READ 180* NG Students, Grades 6–9 (N=272) Performance on *Reading Inventory*, 2013-2014



KIPP NYC, NY

Two-thirds of *READ 180* students at KIPP NYC doubled their expected annual average in growth in Reading.

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Knowledge Is Power Program (KIPP) is a national network of free, open-enrollment, college-preparatory public charter schools with a track record of preparing students in underserved communities for success in college and in life. KIPP NYC, a part of the national network, consists of 11 schools enrolling approximately 4,700 students in Grades K-12. There are five elementary schools, five middle schools, and one high school in KIPP NYC. The majority of the student body is African American (47%) or Hispanic (50%) and receives free or reduced-price lunch (90%). Eighteen percent are students with disabilities, and 8% are English language learners (ELL). The student attendance rate is 95.4%, and the annual student mobility rate is 5%. KIPP NYC's mission is "to teach our students to develop the character and academic skills necessary to succeed in high school and college, to be self-sufficient, successful, and happy in the competitive world, and to build a better tomorrow for themselves and us all."

During the 2014–2015 school year, 321 fifth- through ninth-grade students in all five of KIPP NYC's middle schools and its one high school were selected to participate in a study of *READ 180*'s effectiveness. Students scoring Basic or Below Basic on *The Reading Inventory* were placed into *READ 180* classrooms at KIPP NYC, where they were expected to receive 45 to 90 minutes of instruction five times per week. The model varied across the schools, with some classrooms using a stand-alone *READ 180* Next Generation implementation and some classrooms using an integrated *READ 180* Next Generation model.

Evaluation Period: 2014–2015 **Grades Included in Evaluation:** 5–9

Assessment: Northwest Evaluation Association Measures of Academic Progress (NWEA MAP),

The Reading Inventory **Participants:** N=321

RESULTS

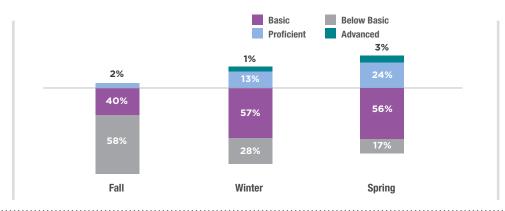
Data from NWEA MAP and *The Reading Inventory* were collected and analyzed for 321 students (59 fifth graders, 98 sixth graders, 85 seventh graders, 27 eighth graders, and 52 ninth graders) who used the program during the 2014–2015 school year. *READ 180* students averaged 89 total sessions, at about three sessions per week.

On average, students grew 163L on *The Reading Inventory*. Eighty-four percent of students met or exceeded annual average growth, and 65% of students met or exceeded two times their annual average growth. Students showed forward momentum in change in proficiency band status over the course of the year. The percentage of students who scored Proficient or Advanced on *The Reading Inventory* increased significantly from 2% in the fall to 27% in the spring. See **Graph 1**.

Students averaged a significant gain of 7 RIT points on MAP, with 70% of students meeting or exceeding typical fall-to-spring MAP growth. For English language learners, 65% exceeded typical MAP growth, and 82% exceeded annual average growth on *The Reading Inventory*. See **Graph 2**. For students with an individualized education plan (IEP), 76% exceeded typical MAP growth, and 82% exceeded annual average growth on *The Reading Inventory*. See **Graph 3**.

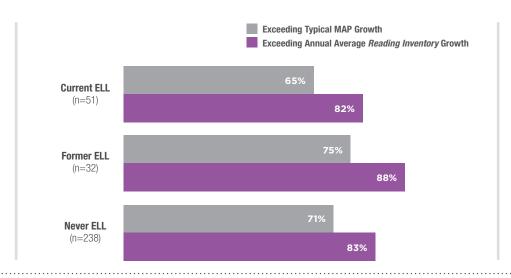
GRAPH 1

KIPP NYC *READ 180* Students Grades 5–9 (N = 321) Performance Band Distribution on *Reading Inventory*, 2014–2015



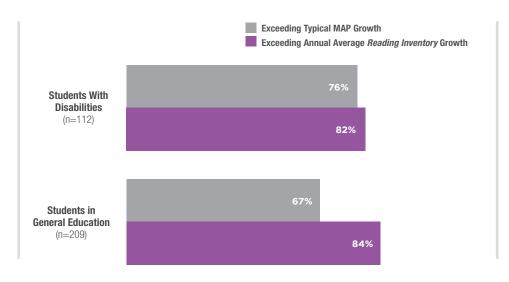
GRAPH 2

KIPP *READ 180* English Language Learner (ELL) Students, Grades 5–9 (N=321) Performance on MAP and *Reading Inventory*, 2014–2015



GRAPH 3

KIPP NYC *READ 180* Students, Grades 5–9 (N=321) Performance on MAP and *Reading Inventory*, 2014–2015



LODI UNIFIED SCHOOL DISTRICT, CA

70% of students exceed average annual growth from fall to spring after using *READ 180*.

Evaluation Period: 2011–2012; 2012–2013

Grades Included in Evaluation: 7–12 (2012–2013);

4-12 (2013-2014)

Assessment: Scholastic Reading Inventory (SRI)

Participants: N=1,032 (2012–2013); N=1,209 (2013–2014)

OVERVIEW

Lodi Unified School District (LUSD), located in San Joaquin County, CA, is a Pre-K to Adult district that enrolls approximately 30,000 students. There are 33 elementary schools, seven middle schools, four comprehensive high schools, and two continuation high schools. In addition, the district offers elementary and middle community day schools and several alternative schools to serve their preschool through adult population.

LUSD adopted *READ 180* Next Generation (NG) beginning in the 2011–2012 school year for Grades 7–12 and expanded to Grades 4–12 for the 2012–2013 school year. The district placed struggling readers beginning in the third grade in a 45–60 minute *System 44* class. In Grades 4–12, the teachers implement a 90-minute model that blends *READ 180* NG and *System 44* instruction. The district has invested in providing ongoing support for teachers and administrators via coaching days and monthly cadre meetings¹. The coaching days are used to strengthen the implementation of the programs, and the cadre meetings provide additional support to ensure that best practices are being used to positively affect student achievement.

For the 2012–2013 school year, 87% of the students participating in the study were receiving free or reduced-price lunch, 61% were English learners, and 22% were students with disabilities. For the 2013–2014 school year, 87% of the students participating in the study were receiving free or reduced-price lunch, 55% were English learners, and 29% were students with disabilities.

RESULTS

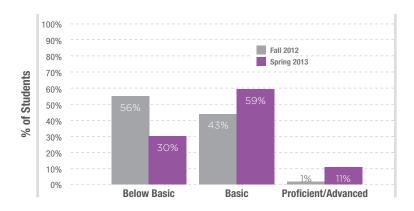
During the 2012–2013 school year, on average, students completed a total of 99 *READ 180* Universal sessions at approximately three sessions per week. After one year of instruction, students demonstrated a significant mean Lexile gain of 139L: the average score increased from 574L at pretest to 713L at posttest. Seventy percent of students exceeded average annual growth from fall to spring. Students showed forward momentum in change in proficiency band status over the course of the year. In particular, there was a 26% decrease in the number of students at the Below Basic level and 10% increase in the number of students at the Proficient level at the end of the year. **See Graph 1.**

During the 2013–2014 school year, on average, students completed a total of 99 *READ 180* Next Generation sessions at three sessions per week. After one year of instruction, students demonstrated a significant mean Lexile gain of 119L: the average score increased from 571L at pretest to 690L at posttest. Sixty-one percent of students exceeded annual typical growth from fall to spring. Students also showed forward momentum in change in proficiency band status over the course of the year. There was a 22% decrease in the number of students at the Below Basic level and a 10% increase in the number of students at the Proficient level at the end of the year. **See Graph 2**.

Due to the successful outcomes from implementing *READ 180* NG and *System 44* NG during the prior two school years, LUSD expanded this tiered intervention to serve students with disabilities in Grades 4–6 during the 2014–2015 school year.

GRAPH 1

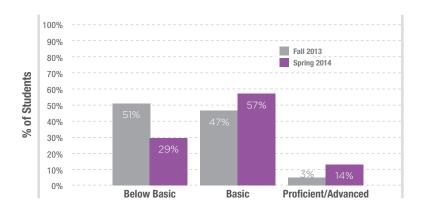
Lodi Unified School District *READ 180* Students, Grades 7-12 (N=1,032) Change in SRI Performance Level, 2012-2013



 $\it Note:$ The average number of days between SRI tests was 262. In Spring 2013, 11% of students were Proficient and 0% were Advanced.

GRAPH 2

Lodi Unified School District Students, Grades 4–12 (N=1,209) Change in SRI Performance Level, 2013–2014



 $\it Note:$ The average number of days between SRI tests was 248. In Spring 2014, 13% of students were Proficient and 1% were Advanced.

59

NAPA VALLEY UNIFIED SCHOOL DISTRICT, CA

Improving outcomes, reducing costs, and lowering special education referrals with *READ 180*.

OVFRVIFW

Napa Valley Unified School District (NVUSD) is representative of school districts in California, serving 18,078 students in 30 schools. Hispanic students comprise just under half the student population. Located in a demanding agricultural region, the district also serves a large migrant population.

In the 2011–2012 school year, NVUSD evaluated the effectiveness of READ 180 for students in Grades 3 through 11. READ 180 was first approved for use in the district in the 2005–2006 school year as a small pilot program. NVUSD monitored its success and slowly grew the program from a pilot to a district-wide service. READ 180 was chosen by the district as it is one of the most researched competency-based reading intervention programs available. Additionally, *READ 180* is designed to support positive behavior interventions and supports (PBIS) that identify and sustain effective school-wide academic and behavioral practices that improve student outcomes. READ 180 does this by incorporating instructional management routines, classroom engagement, clear goal setting, and rewards that may be implemented in parallel with positive behavior interventions. In these ways, *READ 180* is in line with NVUSD's vision for improving student outcomes while reducing costs.

Evaluation Period: 2011–2012

Grades Included in Evaluation: 3–11

Assessment: California Standards Test of English Language Arts (CST ELA); California English Language

Development Test (CELDT) **Participants:** N=18,078

RESUITS

California Standards Test of English Language Arts (CST ELA) and California English Language Development Test (CELDT) scores were obtained for *READ 180* students in Grades 3 through 11. Results from the CST ELA and CELDT demonstrated that the district's *READ 180* students significantly improved their reading comprehension skills. In the 2010–2011 school year, 6% of participating *READ 180* students in Grades 3 through 11 were scoring Proficient and Above on the CST ELA. In 2011–2012, this number increased to 13%, including a jump from 8% to 33% for the district's fourth graders. The CELDT corroborated these gains. Students using *READ 180* experienced significant improvements from the 2011 to the 2012 assessment. In 2012, 48% of *READ 180* students were scoring Early Advanced and Above on CELDT, an increase from 17% in the prior year. See **Graph 1**.

In addition, the district tracked lower referral rates into special education since 2001. In 2004, the district recorded 1,164 students with specific learning disabilities. In 2011, that count dropped to 695. This trend allowed NVUSD to reduce its special education caseload, reduce its associated costs for students with specific learning disabilities, and better focus its services on its academic and behavioral priorities. See **Figure 1**.

As part of the positive behavioral intervention program implemented at NVUSD, *READ 180* has contributed to improved behavioral outcomes and cost savings. In 2009, the district recorded 58 expulsions. That figure dropped to 26 expulsions in 2012, which represents \$188,600 in savings. Suspensions dropped from 4,881 to 2,086 from 2010 to 2012, representing \$83,850 in savings. See **Figure 2**.

GRAPH 1 Napa Valley Unified School District *READ 180* Students, Grades 3–11 (N=877) Performance on CST ELA and CELDT, 2011–2012

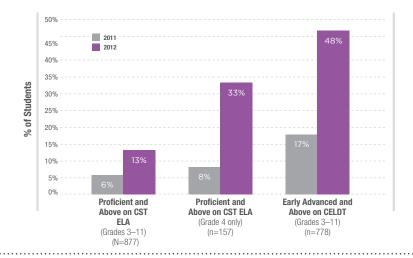


FIGURE 1 Napa Valley Unified School District Students With Disabilities and Specific Learning Disabilities (N=18,078) Grades K-12 Enrollment Trends, 2000–2011

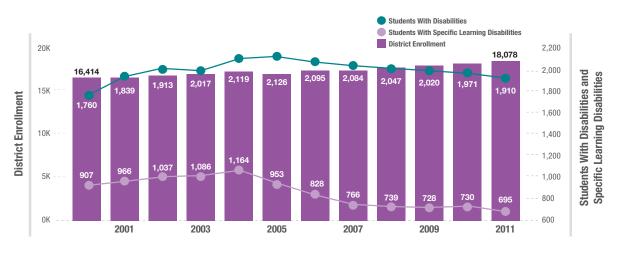
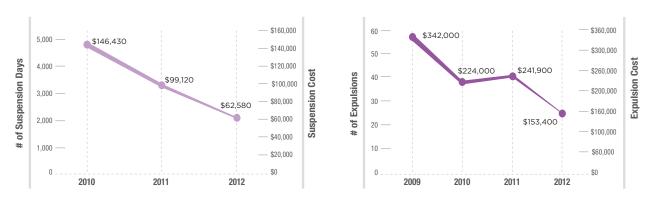


FIGURE 2 Napa Valley Unified School District Students, Grades K–12 (N=18,078) Suspension and Expulsion Counts and Costs, 2009–2012



SPRINGFIELD AND CHICOPEE PUBLIC SCHOOLS, MA

READ 180 raises reading levels for struggling high school students.

OVERVIEW

Springfield Public Schools, the second-largest school system in Massachusetts, is a Title I district enrolling over 25,000 students. Springfield has four high schools, three of which participated in the Striving Readers Program. The neighboring Chicopee Public Schools, also a Title 1 district, enrolls around 8,000 students. Chicopee has two high schools, both of which participated in the Striving Readers Program.

From the 2006–2007 school year to the 2010–2011 school year, The Education Alliance at Brown University conducted a study involving five cohorts of targeted students from Springfield and Chicopee (Research and Evaluation Division, 2012). Students were randomly assigned to either the *READ 180* treatment group, to a second intervention (Xtreme Reading) comparison group, or to a business-as-usual control group.

In order to be eligible to participate in the study, students had to be reading at least two levels below grade level. Additionally, due to the requirements for Xtreme Reading, students identified for *READ 180* were restricted to a range in performance from 680 Lexile (L) to 855L on the SRI. Seventy-one percent of the students who participated in the study were minority, 56% were female, 21% were students with disabilities, 4% were English language learners, and 69% received free or reduced-price lunch.

Evaluation Period: 2006–2011

Grade: 9

Assessment: Stanford Diagnostic Reading Test,

Series 4 (SDRT-4)

Participants: N=679

Implementation: Daily 90-minute model

RESULTS

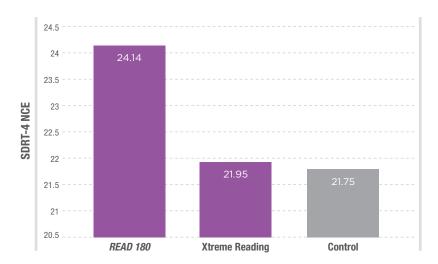
To assess program impact, pretest and posttest data from the SDRT-4 were collected for 679 students (231 students in the *READ 180* treatment group, 223 in the comparison group, and 225 in the control group) across the five years. To assess program implementation, input ratings and classroom model ratings were determined by teacher for each of the five years.

As Graph 1 displays, findings revealed that *READ 180* students demonstrated greater gains than control group students on the SDRT-4 (effect size of .11). When the model was adjusted to account for pretest reading levels, this difference was significant (p = .03). *READ 180* students outperformed the control group students, on average, by 1.5 points on unadjusted Normal Curve Equivalency (NCE) and 2.39 points on adjusted NCE. Conversely, students who were randomly assigned to the Xtreme Reading program did not show statistically significant gains over the control group students.

As Graph 2 shows, in schools where *READ 180* classroom implementation levels were observed to be moderate or high, the average reading scores of *READ 180* students, as measured by SDRT-4 NCE scores, were higher at posttest than control group scores. Controlling for pretest scores and other student characteristics, this difference was statistically significant. Results were more consistent over time for the majority of teachers, especially those implementing at high levels over the entire study period. This same pattern of findings was not found for Xtreme Reading schools. When Xtreme Reading classroom implementation levels were assessed in relationship to outcome scores, the relationship was not significant.

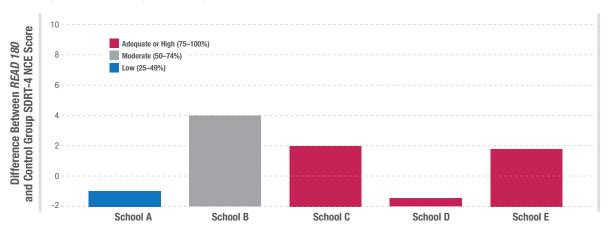
GRAPH 1

Springfield-Chicopee Intervention and Control Group Students, Grade 9 (N=679) Impact of Intervention on Reading Achievement (SDRT-4 NCE), 2006–2011



GRAPH 2

Springfield-Chicopee *READ 180* and Control Group Students, Grade 9 (N=664) Impact of *READ 180* by Level of Implementation, 2006–2011



Note. The relationship between READ 180 implementation and student achievement was significant with READ 180 students evidencing greater gains over control group students when schools implemented the program with moderate to high levels of fidelity. Averages were calculated weighted by the total number of items across years. No schools showed No evidence (0–24%).



SUMMARY

The new *READ 180* Universal embodies the evidence base and efficacy of reading research as well as the experience and best practices of educators. The development of this newest edition of *READ 180* is grounded in the renowned research of *READ 180* authors and partners, and in an extensive understanding of the field of reading research.

As the evidence base on what makes a successful blended learning instructional program has grown since *READ 180*'s beginning in 1999, we have continually sought to improve our program to reflect the most current knowledge available on accelerating the learning of all students.

As demonstrated in this paper, the specific elements that were added to *READ 180* Universal include an array of enhancements informing an educative curriculum for teachers as well as an increased focus on the neurological underpinnings of reading for all students, especially those who are struggling learners. The new program components enable teachers to continuously improve their instruction, provide more opportunities for students to read independently and listen to read alouds, realize the important role of mindset and self-efficacy as well as social-emotional learning, and enhance personalized instruction for all students. The evidence base and the results of the efficacy studies detailed in this paper have been the driving forces behind improving this newest edition of *READ 180*. As such, the program

includes further-enhanced reading instruction that is designed to activate the entire brain. With instruction powered by *System 44*, *READ 180* Universal gives students the foundational skills they need to read complex texts.

An increased focus on writing helps students plan, organize, and write across genres in the service of reading. *READ 180* Universal gives greater attention to the importance of independent reading and read alouds to make sure students increase their background knowledge and stay engaged and motivated.

With new resources to ensure that all students have a growth mindset, *READ 180* Universal encourages all students to persevere through challenges and obstacles. The Student Application (Student App) in *READ 180* Universal has been designed to meet the needs of all students across the constructs of reading in order to give them instruction and practice in the areas that they need, while building on their strengths.

In short, *READ 180* Universal has made improvements to make it easier for teachers to do what they do best: change students' lives through instruction. We feel confident that these elements will make this edition of *READ 180* the best yet.

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