

Evidence-Based and Aligned with Contemporary Science



The Reading Simplified system emerges from a wide-ranging synthesis of the latest reading research and theory. Researcher, teacher, staff trainer, and tutor, Dr. Marnie Ginsberg, developed Reading Simplified based on extensive work with students and teachers, as well as an in-depth study of the reading research literature that briefly follows.

Reading Simplified derives its efficiency and efficacy from the integration of sounds and symbols simultaneously--from the very beginning of reading instruction.

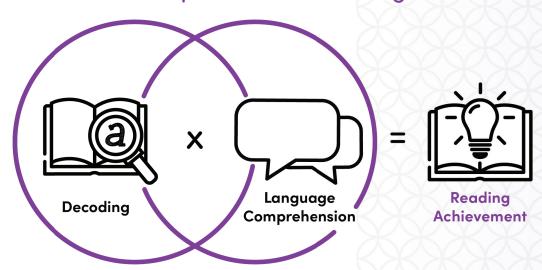
In addition, orthographic learning is supported not only through strong sound-symbol processing but also through a) word lists that target high-frequency letter-sounds and words and b) re-reading practice that rapidly accelerates learning of high-frequency words.

The Science of Learning to Read

First, from the ground up, learning to read is dependent on oral language abilities (Dehaene, 2010; Seidenberg, 2017; Snow, Burns & Griffin, 1998). Language is the backbone upon which we build our word recognition skills. Children who develop strong semantics, syntax, phonology, morphology, pragmatics, and vocabulary in the first years of life will be much better prepared to crack the written code (Castles, Rastle, & Nation, 2018).

Yet language skills, alone, will not build an excellent reader. What else is needed? The **Simple View of Reading** (Gough & Tunmer, 1986) efficiently models for us the essential components of reading achievement: the product of decoding (or word identification) and language (or linguistic) comprehension. The Reading Simplified approach supports the young student transitioning into the important domain of decoding and word identification through its special attention to developing sound-based decoding skills by mapping sounds to print.

Simple View of Reading



In the last 40-50 years, researchers have established an impressive body of research revealing that the primary route to reading acquisition is phonological decoding or sound-based word attack (Dehaene, 2009; Seidenberg, 2017; Share, 1995; Snow, Burns & Griffin, 1998; Stanovich, 1986). This discovery forms the backbone of the Reading Simplified activities: in each step along the way towards fluency, the student is drawn to connect her own awareness of phonemes (or sounds in words) to the graphemes (phonic spellings) of the word. Accurately practicing these phoneme-grapheme (or sound-symbol) connections with sufficient repetition is what builds the orthographic knowledge for rapid word recognition (Kilpatrick, 2015). In other words, typically developing students decode a word; re-read that word a few more times; and then that word is orthographically mapped (aka a "sight word" has been formed; Ehri, 2015). Broadly speaking, this is the foundational step leading towards fluency.

The queen researcher of orthographic mapping and word identification, Linnea Ehri, explains this system succinctly as such:

To expand on the above research snapshot, note that an abundance of research has documented the importance of explicit code instruction (Adams, 1990; Castles, Rastle, & Nation, 2018; Chall, 1967; Moats, 2020; NRP, 2000; Snow, Burns & Griffin, 1998). Others have demonstrated the power of integrating phonemic processing with print instruction for optimal gains (Bus & Ijzendoorn, 1999; National Reading Panel, 2000). Finally, orthographic learning (our spelling system) bi-directionally supports phonological decoding (and vice versa; Wagner, Torgesen, & Rashotte, 1994; Share, 1995).



Decoding is a means of getting spellings of words into memory so they can be read by sight. Being able to connect letters in spellings to sounds in pronunciations spontaneously when spellings of words are seen and heard also serves to retain words in memory. Both decoding and letter–sound mapping skills require knowledge of the alphabetic writing system. Gradual acquisition of this knowledge propels students through the alphabetic phases to become skilled readers (Ehri, 2020, pp. 557-8).

Seidenberg and McClelland's triangle computational reading model (1989) further elaborates on the mechanisms of word acquisition and recognition. The tripartite domains of semantics, phonology, and orthography connect dynamically to help the child transpose the sounds of a word (phonology) to its related spelling patterns (orthography) to its meaning (semantics). The catalyst of an effective word-reading system is cultivating the phonological domain. Indeed, learning reading researcher emphasizes:

David **Share's self-teaching concept**, which was mostly first well demonstrated in 1995, and has had ongoing studies to validate it, explains how this process works for rapid acquisition of reading over time. Share writes,

"According to the self-teaching hypothesis, each successful decoding encounter with an unfamiliar word provides an opportunity to acquire the word-specific orthographic information that is the foundation of skilled word recognition."

"For reading scientists the evidence that the phonological pathway is about as close to conclusive as research on complex human behavior can get" (Seidenberg, 2017, p. 124).

The above models and theories explain how decoding and sight word automaticity develop but one may still wonder how the young child gets from rudimentary decoding skills to recognizing the 20,000-60,000 words needed to be a good adult reader. The reading researcher David Share provides another theory of word learning that is essential for understanding reading development:

In other words, students hear the sounds in the words, and they map them or link them onto specific print, in a specific order. Share goes on to say, "A relatively small number of successful exposures appear to be sufficient for acquiring orthographic representations, both for adult skilled readers and young children." That is, reading a word with a sound-based approach once, twice, or maybe four times for most kids will cause it to stick orthographically. Not that they remember the way it looks--that it is tall or short letters-but that they've linked the sounds and those symbols in that precise order deeply in their orthographic learning. It is a part of the brain that is clearly different from their visual processing (Dehaene, 2009; Seidenberg, 2017).

Share continues with, "In this way phonological recoding acts as a self-teaching mechanism, or built-in teacher enabling a child to independently develop both word- specific and general orthographic knowledge." So a child learns the word "shout," but at the same time, he is also learning the pattering O-U is "ow," and maybe even the larger orthographic unit, "out."

Significantly, the self-teaching theory explains that with sufficient phonemic awareness, phonics knowledge, and a useful decoding strategy, the developing reader actually teaches herself much of the code through accurate word-reading practice (Share, 1995). The teacher's role is therefore essential (a) in guiding each child to develop these requisite sub-skills and (b) in ensuring adequate and accurate reading practice.

The final step on the path from phonemic awareness and letter-sound knowledge to decoding to sight word automaticity to mature reading is fluency-building. After reviewing more than 100,000 experimental research studies, the National Reading Panel (NRP, 2000) found fluency to be one of the five essential components of a comprehensive reading program. The NRP defines fluency as the ability to read text accurately and quickly, with expression. Expression, or prosody, is defined as the ability of readers to divide text into meaningful chunks such as phrases and clauses, pausing appropriately during reading. Additionally, the NRP notes that fluency "is not a stage of development at which readers can read all words quickly and easily. Fluency changes, depending on what readers are reading, their familiarity with the words, and the amount of their practice reading text" (Armbruster et al., 2006). The NRP report describes fluency as a bridge between word recognition (decoding) and comprehension.

The NRP report concludes that there are two key instructional activities that promote fluency: modeling fluent reading and repeated and monitored oral reading where students read text aloud multiple times while receiving guidance and feedback from the teacher. Research also supports the repeated oral reading done with activities such as audio-assisted reading, echo reading, partner reading/peer guidance, and readers' theater. Repeated oral reading significantly improves word recognition, speed, accuracy, and fluency (Kuhn, Rasinski, & Zimmerman, 2014).

More recent research indicates that the largest factor determining a student's fluency is the size of a student's sight vocabulary; here, sight vocabulary means words a person can identify immediately and effortlessly, whether they are phonetically regular or irregular. According to Kilpatrick (2015), the best approach to addressing fluency is to ensure students have proficient orthographic mapping skills. Thus, fluency is not just a separate reading sub-skill but mainly a byproduct of being able to read most words in a text automatically.

Thus far these models and areas of research explain much of the core of word reading acquisition; yet, as the Simple View of Reading demonstrates, language comprehension is the other essential domain for reading achievement. Scarborough's reading rope (2001) delineates the Simple View further by showing that in both the Word Recognition domain and in the Language Comprehension domain. As mentioned earlier, the word recognition domain works together with the language comprehension domain to produce a skilled reader. In the Reading Simplified system, attention to language comprehension is supported and extended both in Word Work activities—by defining or elaborating on all words—and in oral reading activities—especially through the student's practice of summarizing and making knowledge and vocabulary connections.

The Science of Learning and Connection

The above models of the Simple View of Reading, Scarborough's Reading Rope, Triangle Computation, and Self-Teaching describe the cognitive development of reading. However, they do not address the interpersonal dynamics that drive successful achievement. The Reading Simplified enfolds other models and research to build a comprehensive system that will work in day-to-day practice in a variety of schools. Some of the more important theories include diagnostic instruction, reading engagement of the child, and the teacher-student relationship.

In their K-3 practice guide, the Institute for Education Sciences argues that differentiated small group instruction, centered on a group's specific reading skills, is likely the best way to serve the variety of reading needs teachers will encounter in classroom contexts. The practice guide encourages teachers to offer more intense guidance and diagnostic scaffolding in that small group setting, while other children are extending their learning in other settings, such as paired reading or listening along centers (Gersten et al., 2009). The pioneering work of Carol Connor and colleagues (2009) also demonstrates that teachers who serve students' instructional needs in small groups based on diagnostic information enjoy students with better reading outcomes.

In his influential Matthew Effects paper, Stanovich writes, "the initial specific problem may evolve into a more generalized deficit due to the behavioral/cognitive/motivation spinoffs from failure at such a crucial educational task as reading" (1986, p. 393). It is at this juncture of cognition, motivation, and behavior that the engagement model of reading (Guthrie & Anderson, 1999) fits to integrate these three domains. Stanovich and Share both hint at the motivational necessities for a learner to have ample exposure to print but do not expand on the theory and research that explain why a child might elect to read. Guthrie and Anderson explain how an engagement theory of reading fills this void:

"Reading traditionally has been defined as a set of skills or competencies....We believe this achievement-oriented view of reading is accurate but incomplete. In our view, reading should be conceptualized as engagement....[E]ngagement in reading is a motivated mental activity with vital consequences for world knowledge and social participation (1999, p. 17-8).

While Share (1995) and Stanovich (1986) elaborate on the reciprocal relationship between knowledge and strategies for the early reader, Guthrie and Anderson highlight motivation as a mediating, bi-directional factor in children's reading experiences. "As motivation increases, engagement increases. When students are intrinsically motivated, they learn to use cognitive strategies for reading...As students gain conceptual understanding, their sense of self-efficacy grows and their motivations for reading increase..." (1999, p. 20). Given this important affective domain of reading achievement, the Reading Simplified program nurtures teachers' insights into each child's current engagement; lesson plans adapt in part due to motivation and engagement.

Finally, for most children, the teacher stands at the nexus of the child's incipient reading system. The extent to which a teacher can provide the student with what he needs instructionally and emotionally will likely account for much of the student's success or difficulty. Pianta (2006) conceives of a successful literacy system developing within a teacher-student relationship that provides sufficient instructional and emotional support. Thus, the quality of instruction and related achievement is somewhat influenced by reciprocal relationships between child traits and abilities and teacher beliefs and practices. Reading Simplified teachers develop strong relationships with students in the small group setting in part because of the (a) guidance in how to provide continual, positive, specific feedback and (b) diagnostic approach to meeting each group's diagnostically determined Most Pressing Need.



Earliest Roots of Reading Simplified's Efficacy

Beyond the general theoretical and research literature that points to the value of the above principles of reading development and instruction, Reading Simplified springboards from a line of efficacy research that goes back to at least 1901. The following sections will detail the efficacy behind the historical roots of Reading Simplified beginning with Montessori. We'll cover ground from Montessori to Lindamood's LiPS to Phono-Graphix to the Targeted Reading Intervention--all grandmothers, so to speak, of the Reading Simplified system.

First, the first female Italian physician, Dr. Maria Montessori developed an approach to education, including reading, that enabled the class of 50-60 mentally retarded children she was given to pass the state educational tests designed for typically-developing children--"an event that aroused international attention" (Lillard, 2005, p. 16) for its unexpected efficacy. In a Montessori setting, children ages 3 and 4 are guided to notice the sounds in words (i.e., phoneme awareness) through the game "I Spy." They also trace letters and learn their phonetic sounds--not the letter names. Soon students are asked to spell simple 3-sound words using a Movable Alphabet.

For these young children, "[r]eading emerges spontaneously during the months after writing begins" (Lillard, 2005, p. 16). The Montessori sound-based entrée to reading of phoneme awareness, letter-sound instruction, and spelling simple words align with the Reading Simplified activity Build It, and the sound-to-symbol approach used throughout the system.

As Montessori did not teach children how to read in English, but in Italian, further refinements by Montessori-trained educators, such as Muriel Dwyer, help with the more challenging orthographic patterns of English. In 1968, Dwyer described how to introduce advanced phonics, such as "oa" and "ai," by teaching one sound (i.e., /oa/) and its various spelling (i.e., "o," "o_e," "ow," "oa," "oe") (reprinted 2004). Moats suggests a similar "sound to print" approach in her seminal works "Teaching Decoding" (1998) and Speech to Print (2000). McGuinness, too, advises that we reveal the code organized around sounds first (rather than letters; 1998).

Efficacy of LiPS and Phono-Graphix

Predecessors to Reading Simplified

The thread of insight from Montessori in the early 1900's to first attend to the sounds in words before teaching spelling or reading gained much more proof of importance through the study of what came to be termed phonological awareness. In the 1960's, Pat Lindamood developed a reading instructional approach that became known as A.D.D. (Auditory Discrimination in Depth) and then, later, LiPS (Lindamood Phoneme Sequencing Program). In the pivotal LiPS activity, "Tracking," teachers guide students to move cubes (and later letter-sound squares) in and out of words to challenge students' phonemic manipulation skills.

A program developed in the 1990's, Phono-Graphix (McGuinness, McGuinness, & McGuinness, 1996), enfolded previously discussed effective Montessori activities, added the LiPS tracking exercise but dropped the oral-first and articulatory feedback emphasis in the LiPS "tracking" activity. Notably, both LiPS and Phono-Graphix merit considerable attention in David Kilpatrick's review of the intervention research (2015). He indicates that impact outcomes vary widely for reading interventions that report "statistically significant" findings. However, one group of interventions yields much higher outcomes.

Kilpatrick assigns just four programs to his "Highly Successful" category of reading interventions because they produced Standard Score increases of 14-25 points--in contrast to the minimal (0 to 5 Standard Score points) or moderate (6 to 9 Standard Score points) categories. Significantly, three of Kilpatrick's four "Highly Successful Outcome Studies" used either LiPS or Phono-Graphix (2015). These two approaches share many theoretical and practical roots, such as incorporating activities to develop strong phonological processing, yet Phono-Graphix laid the groundwork for the Targeted Reading Intervention which, in turn, served as the springboard for Reading Simplified. One study by Simos and colleagues (2012) included intense Phono-Graphix training for just 2 months for students ages 7 to 17 with dyslexia. Before and after magnetic source imaging scans revealed that reading achievement improved considerably and brain regions associated with dyslexia were no longer activated. The authors conclude that "dyslexia can be reversed." As Kilpatrick wisely points out with his three-categorization system of efficacy and impact, interventions of this level of impact and speed are not typical in the research literature. Similarly, Torgesen (2006) says this about the efficacy rates of LiPS and Phono-Graphix type interventions for students with reading disabilities, "[t]he consistency in rate of gain across these studies suggests that the high rates of growth obtained in the study described earlier in this section.

Efficacy of the Targeted Reading Intervention

Based upon her tutoring experiences using Phono-Graphix and the cutting-edge reading research at the time, Ginsberg developed the Targeted Reading Intervention (TRI) in 2005 in the context of an I.E.S.funded intervention randomized-controlled experiment (Ginsberg, Vernon-Feagans, Amendum, 2010). Research on the TRI continues to this day. The Targeted Reading Intervention (TRI) is a professional development approach via webcam coaching that also teaches the same explicit, systematic, and diagnostic sound-symbol decoding method for word recognition and fluency for K-2 struggling readers as is enfolded into Reading Simplified for all beginning or striving readers. Key activities from Montessori and Phono-Graphix were adapted to the TRI instructional intervention, such as building, reading, and manipulating words with a focus on the sounds in words. Additionally, the TRI added a Re-Reading for Fluency component to increase word recognition and fluency growth, as suggested by research (Kuhn, Rasinski, & Zimmerman, 2014; NRP, 2000).

For 15 years, researchers at the University of North Carolina at Chapel Hill have examined the efficacy of the Targeted Reading Intervention in multiple randomized controlled trials. Across numerous studies, struggling K-1 readers have made strong gains in multiple reading measures, including spelling of sounds, word attack, word identification, and comprehension, with effects sizes varying from .3 to .7 (Amendum, Vernon-Feagans, & Ginsberg, 2011; Vernon-Feagans, Kainz, Hendrick, Ginsberg, Amendum, 2013; Vernon-Feagans et al., 2010; Vernon-Feagans et al., 2012; Vernon-Feagans et al., 2015; Vernon-Feagans et al., 2018).

One such study, recognized by the I.E.S. What Works Clearinghouse, affirmed its effectiveness, particularly in alphabetics. A notable cluster randomized trial involved seven low-wealth schools across New Mexico and Texas, engaging 43 classrooms and 364 K and 1st grade students of diverse backgrounds (Amendum, Vernon-Feagans, & Ginsberg, 2011). These students underwent a comprehensive set of standardized reading tests, including the Woodcock-Johnson Diagnostic Reading Battery. In the TRI group, classroom teachers dedicated approximately 15 minutes daily to individualized instruction for struggling readers, covering Re-Reading for Fluency, Word Work, and Guided Oral Reading, benefiting up to five students per teacher annually. The intervention yielded significant reading improvements across all measures compared to control groups with effect sizes of Spelling of Sounds (.4), Word Attack (.52), Word Identification (.52), and Comprehension (.72). The authors note,

To our knowledge, this is one of the few studies that has demonstrated that classroom teachers can successfully implement an intervention with struggling readers....[U]nlike many other studies, TRI appeared to impact a broad range of reading skills, including letter and word identification, decoding, spelling, and reading comprehension (p. 124; bolding added).

Additionally, a more recent study of the TRI found effect sizes for English language learners, specifically, of over .4 on word reading measures (Amendum, Bratsch-Hines, & Vernon-Feagans, 2017). Indeed, the TRI has shown such promise that the-I.E.S. Director listed it as one of a handful of proven programs ready for future testing at scale. The Targeted Reading Intervention is also considered as having strong-evidence under ESSA because they have met scientific evidence of effectiveness under ESSA with 2 well-designed and well-implemented experimental (i.e., randomized) study.

Previous Research Emdorsements of the TRI

In addition, the earlier program developed by Ginsberg, the Targeted Reading Intervention, has been endorsed by three different leading research non-profits as evidenced-based practices, ready for implementation:

the Annie E. Casey Blueprint for Healthy Youth Development;

the Rand Corporation's Promising Practices Network; and

the Best Evidence Encyclopedia from Johns Hopkins University and Dr. Robert Slavin.



TRI Insights Lead to Reading Simplified

Based on the experiences of observing hundreds of teachers in Nebraska, Texas, North Carolina, and New Mexico implement the Targeted Reading Intervention, as well as more modern research, Ginsberg developed Reading Simplified to serve a wider audience. The same core lesson components in the TRI of Re-Reading for Fluency, Word Work, and Guided Oral Reading are core to Reading Simplified. In addition, the same core Word Work activities--now termed Build It, Switch It, Read It, Sort It, and Write It-are implemented in Reading Simplified. These same Word Work activities efficiently and effectively help beginning and striving readers to master both decoding and encoding by integrating PA, phonics, and strategies in the context of real words. (However, Sort It has been enhanced with the addition of Key Sentence mnemonics to help advanced phonics learning even more. Additionally, a streamlined scope and sequence was developed both 1) to integrate the importance of high frequency spellings and words and 2) to expedite teachers' implementation speed.)

Additionally, while the same core instructional activities from the TRI are utilized in Reading Simplified, Reading Simplified does not apply just to a one-on-one intervention context for K-2, as the TRI did. The Reading Simplified system suits any beginning or struggling readers' needs and is suggested to mainly fit the small group reading instructional setting. Whole class and one-on-one uses are also easily used. Further, the university consultants delivering webcam-based bi-weekly coaching in the TRI is a challenging expense to manage for most districts. Reading Simplified, instead, offers a complete online video course, quizzes, and online individualized feedback in a discussion forum, so each teacher can master the concepts at her own pace and fit the system to her unique context. Or, cohorts of teachers can adopt a team-study plan and travel through the streamlined program together, sharing their insights as they go. Schools can also opt for coaching from Reading Simplified literacy specialists via Skype/Zoom or in-person to personalize teachers' professional learning even further.

Researchers have demonstrated the power of data-based, individualized, contextualized coaching and cohort study as a better means of professional learning (e.g., Joyce & Showers, 1988). In the Reading Simplified Academy, for about an hour a week, teachers learn new techniques. Then they practice each technique with their students, reflect upon the outcomes in an online discussion board, and receive individualized feedback from Dr. Ginsberg and other Reading Simplified specialists. Thus, in a matter of 1-3 months, teachers master the Reading Simplified system and then receive ongoing, individualized coaching tailored to their unique classroom and students. This ongoing, contextualized model of professional learning fulfills what the U.S. Department of Education (2002) has urged as an exemplar-"Professional learning must be an ongoing, continuous activity, and not consist of 'one-shot' workshops or lectures."

Beyond the efficacy data of the Targeted Reading Intervention instructional model, more data on Reading Simplified specifically is emerging. An evaluation by the American Institutes of Research (AIR) of Reading Simplified's first-year implementation in a low-income, predominantly ELL community reported a 34% growth in K-3 students, including those in intervention settings. All 16 teachers involved endorsed the program, recommending it to peers. Moreover, effect sizes for grades K through 3rd grade were .89, 1.2, .84, and 1.01, respectively—each considered large. Finally, another report from a Georgia school in a low-wealth community revealed that after the first semester of Reading Simplified implementation of general and special education, Kindergarten Nonsense Word Fluency rose by 12.5%, surpassing the previous year's 82.51% proficiency rate. Additionally, 1st grade Winter Oral Reading Fluency increased by 10.5%, exceeding the prior year's 64.08% proficiency rate.

[See the following page for an infographic on the AIR Evaluation of Reading Simplified.]





34% growth in one year

What Teachers Are Saying

"I love the quick progress we can make with Reading Simplified and how **easy it is to differentiate** for all of our students."

> I am **beyond grateful** for this instruction... I am absolutely blown away by their progress and growth.

I have a **classroom full of readers**because of
Reading Simplified.

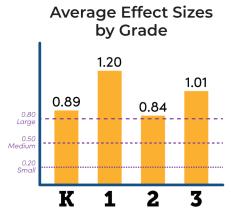
"(Students) have double
and tripled their composite
scores on DIBELS and have

insane accuracy scores."

The routines

are easy to

implement.



Schoolwide Risk Status on DIBELS Composite





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Alignment with Standards

Not only does the Reading Simplified system stem directly from the latest in reading research and springboard from the TRI--a thoroughly researched reading intervention with strong efficacy--it also aligns tightly with the U.S. Common Core State Standards (see other document for alignment). Each of the handful of core Reading Simplified activities integrates multiple state standards. For instance, the multi-sensory activity, Switch It, addresses over 17 CCSS just in one simple 5-minute activity. This is one example of how teachers gain efficiencies in instructional time with Reading Simplified activities.

In conclusion, we traversed several foundational models and theories of development for word reading achievement that encompass not only the cognitive domain but also the affective and interpersonal domains. These are the critical features research has directed us at Reading Simplified towards in our quest for excellence in reading...for all.

