

Spalding's The Writing Road to Reading

Research Foundation & Logic Model



Authors:

Rachel Schechter, Ph.D. Laura Janakiefski, Ph.D. Harley Abrevaya, Ed.M

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RESEARCH-BASED DESIGN

LXD Research Recognition for Spalding Education



This product has been rigorously evaluated and is hereby acknowledged for meeting the educational impact criteria of the Every Student Succeeds Act (ESSA), warranting a **Level 4** for "**Demonstrates a Rationale**." This recognition is based on its proven effectiveness in enhancing gradelevel learning outcomes.

REVIEWED BY THE LXD RESEARCH EXPERT REVIEW PANEL

Rachel Schechter, Ph.D. Founder of LXD Research October 18, 2024

DATE



Educators search for high-quality research and evidence-based interventions to strengthen grant applications, to support comprehensive and targeted schools, or to implement new programming in their schools. Evidence requirements under the Every Student Succeeds Act (ESSA) are designed to ensure that states, districts, and schools can identify programs, practices, products, and policies that work across various populations.

Educational programs document their evidence of design, effectiveness, and impact in order to be eligible for federal funding. While there is no singular authority that determines a program's tier, the Department of Education's Office of Educational Technology provides standards to assess the varying levels of strength of research for education products.

The categories for ESSA Evidence are: strong (Tier 1), moderate (Tier 2), and promising (Tier 3) evidence of effectiveness, or demonstrates a rationale to be effective (Tier 4).

This product meets the requirements for Tier 4:

- Documentation of how the product's design relates to intended outcomes, with corresponding academic, published research
- Describes the product's features and outcomes in a logic model
- A study is planned and/or currently underway
- A third-party research organization has reviewed the documentation for ESSA validation



When product designers leverage learning sciences to design their programs, educators can better target instruction, and students' skills soar. Through interviews with the product designers, an evaluation of their research-informed activities, and a planning of an efficacy study, this product meets the criteria for LXD Research's ESSA Tier 4 Evidence.

- Rachel Schechter, Ph.D., Founder of LXD Research



What is Spalding's The Writing Road to Reading program?

Romalda B. Spalding was passionate about making sure every child could read. In this pursuit, she designed a researchdriven method to support children in becoming fluent and thoughtful readers and writers. She established The Spalding Education Foundation in 1986, which has grown into its present form as Spalding Education International. Spalding combines an educational philosophy with a methodology consisting of time-tested principles of learning and instruction that are applied across the curricula.

Spalding's *The Writing Road to Reading* is a book and program designed to be used with corresponding professional learning, with the aim of introducing students to the most fundamental pieces of language. The program is designed to support teachers in delivering explicit, interactive, diagnostic, sequential, multi-modal, integrated instruction on spelling, writing, and reading. The training and instructional materials are informed and backed by research, covering effective instructional strategies for teaching phonemic awareness, feature recognition, letter recognition, sound-symbol relationships, spatial placement, vocabulary, sentence structure, and text comprehension.





Accredited by:

- International Dyslexia Association
- International Multisensory Structured
 Language Education Council



Spalding's Professional Learning Offerings

Spalding offers multiple professional learning options to train educators about how to implement *The Writing Road to Reading*. There is a sequence of two 45-hour courses, *Reading Foundations* and *Effective Strategies for Writing and Reading*, offered onsite or with virtual components, which are designed for K-6 general and special education teachers, specialists, instructional assistants, administrators, and tutors.

- The *Reading Foundations* course covers the essentials to implement *The Writing Road to Reading* in the classroom.
- The *Effective Strategies for Writing and Reading* course helps educators expand their understanding of how to best implement *The Writing Road to Reading*, to implement higher-level strategies in their classrooms.

Both courses include interactive components where educators can experience instruction through students' eyes, through role play and practice demos with peers. Spalding also offers opportunities to become a Spalding Coach, and provides an online home educator course for parents. For more information about these course offerings, visit https://spalding.org/courses/.



Spalding Resource Center

Through the Spalding Resource Center, educators can access the tools, training, and resources that correspond to the professional learning courses and support teachers to implement the *The Writing Road to Reading* in their classrooms. Spalding works to continually update and improve the offerings available in the resource center. The digital library houses hundreds of videos, lessons, materials, additional training, course refresher videos, objective-aligned activities, access to digital products, and much more.





Author's Page

About Romalda, the author of THE SPALDING METHOD®



Romalda Bishop Spalding

Formally trained as a classroom teacher with a Masters Degree from Teachers College, Columbia University, Romalda Spalding had a passion for ensuring every child could read and write successfully. When she recognized that her exceptional preparation was not enough to teach all children to read, she sought the expertise and guidance of Dr. Samuel T. Orton, a renowned neurologist specialized in helping children with dyslexia and other learning differences. Following her training, Romalda created THE SPALDING METHOD[®], a technique designed to empower children of all reading abilities to achieve fluency and become thoughtful readers, writers, and communicators.

In 1986, she eventually established The Spalding Education Foundation (now Spalding Education International) with the purpose of making the method accessible to the world. Within the timeline of national literacy development discussions, Romalda proved to be ahead of her time, eliciting thoughtful consideration behind the philosophy, principles, and procedures for teaching structured literacy before its more recent rise in popularity.



For more about Romalda Spalding or the history of THE SPALDING METHOD[®], visit https://spalding.org/history/





Testimonials

What Educators are saying about The Writing Road to Reading



The Writing Road to Reading is a powerful tool for professionals because it is based on knowledge of how the brain works, coupled with sound educational principles. THE SPALDING METHOD[®] changes lives: not only do students gain in literacy and self-confidence, but success with literacy is linked to good social and emotional adjustment and strong vocational outcomes.

Carol Margeson, PhD

Clinical Psychologist Sydney, Australia

The strength of THE SPALDING METHOD[®] is that children quickly learn the skills of reading, enabling them to understand and enjoy good literature at an early age. Spalding is effective because the principles and methods of instruction are well grounded in reading research, as appropriate for individuals with dyslexia and other language-based reading disorders as for students in regular classrooms.



Sylvia Richardson, MD, LittD

Distinguished Professor of Communication Sciences and Disorders, Clinical Professor of Pediatrics, Emerita University of South Florida



The Writing Road to Reading program provides language instruction at the sound, word, sentence, and paragraph levels. The program's multisensory delivery system develops both visual-motor and auditory processing skills required for success with language in print. Students who are instructed with this program become confident, effective readers and communicators.

Ann Remond, PhD

Cognitive Scientist Sydney, Australia



Spalding's Writing Road to Reading Logic Model

PROBLEM STATEMENT

Students need direct, explicit instruction in spelling, writing, and reading to build essential literacy skills. Many programs that explicitly teach reading skills often isolate instruction and fail to integrate spelling and writing skills central to students' overall literacy. Further, many schools lack the resources and teacher training necessary to deliver effective instruction and meet students' needs. Spalding's *The Writing Road to Reading* training and materials use explicit, systematic, and multimodal phonemic-based instruction to teach foundational spelling, writing, and reading skills.

RESOURCES

Training Courses:

- Two 45-hour teacher training courses
- Hardcopy of The Writing Road to Reading text

Learning Management System:

- Training videos with modeling and classroom examples
- Discussion Boards
- Homework Assignments
- Hyperlinked paths to the Spading Resource Center

Spalding Resource Center:

- Language for modeling and coaching letter formation
- Letter to parents about how to use the *Phonograms* by *Spalding* app
- Ayres spelling/vocabulary word lists
- Teacher Self-reflection checklists
- Assessment checklists and progress monitoring tools set up for data analysis
- Intervention and enrichment activities
- Word Analysis games
- Oral Phonogram Review tools
- Decodable readers about animals, science lessons, SEL topics, and more
- Oral Reading Fluency Manual
- Classic Teacher's Guide
- Supplemental Teacher's Guide

STRATEGIES AND ACTIVITIES

Educators:

- Complete training sessions and activities.
- Model, coach, scaffold, and fade instruction of phonemic awareness, phonograms with handwriting instruction, spelling, reading, and writing skills.
- Monitor student progress with weekly check-ins.
- Provide targeted feedback.
- Adjust instruction to individual students' needs.
- Self-assess and engage in peer feedback.

Students:

- Engage in daily explicit instruction and integrated practice of phonograms, spelling, handwriting, reading, and writing skills with spiraled interleaved review.
- Learn and practice 29 rules of pronunciation, spelling, and language use.
- Practice articulating and explaining their thinking.
- Reflect on their current and previous work.
- Apply their skills and explore connections to new domains and content.
- Use the *Phonograms by Spalding* app for at-home learning.

Administrators:

- Support ongoing educator training.
- Work with educators to review program data to guide implementation.





OUTPUTS

Educators:

- Develop their skills and knowledge through the training courses.
- Embed diagnostic processes within lessons.
- Apply instructional strategies and routines with fidelity.
- Implement all Spalding spelling, reading, and writing lessons.
- Track student completion and monitor progress across weeks.
- Identify and address struggling students' needs.
- Align teaching approach to Spalding methods.

Students:

- Complete all in-class practice activities.
- Progress along the sequence of instruction to more complex topics.
- Demonstrate improved accuracy and more automatic recall of phonograms and spelling rules.
- Demonstrate growing knowledge of spelling and vocabulary skills in weekly check-ins.
- Engage in and complete activities with increasingly more independence.

Administrators:

- Guide and adjust continued professional development for educators multiple times in the year.
- Complete all scheduled reviews and track program data throughout the school year.

SHORT-TERM AND INTERMEDIATE OUTCOMES

- Educators grasp the rationale and methods behind the program and are empowered to use it.
- Educators assess students' reading and spelling proficiency flexibly to address specific learning needs.
- Students improve their ability to speak precisely, spell accurately, write proficiently, and read fluently with comprehension, growing their overall literacy skills.
- Students' confidence in reading, spelling, and writing increases.

LONG-TERM OUTCOMES AND IMPACTS

- Educators have a vital impact in closing achievement gaps and improving literacy rates.
- Students are literate and have strong communication skills to thrive in their everyday lives.
- Students see reading and writing as useful skills that bring meaning and value to their future.
- Students develop the literacy skills to become confident and eager lifelong learners.

ASSUMPTIONS

- Educators have Internet access for the Learning Management System and Spalding Resource Center.
- School and district leadership are invested in providing educators with opportunities for sustained professional development and support using Spalding.





Spalding Foundational Research Summary

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Introduction: Product Background & Overview

After working with Dr. Samuel T. Orton, Romalda Spalding developed a method to empower students to become "fluent and thoughtful readers and writers." In 1986, she established the Spalding Education Foundation to perpetuate her method. Spalding Education International (SEI) is a non-profit corporation. To promote and advance the method further, SEI offers courses and an online resource center to train teachers and certify instructors, as well as comprehensive lessons outlined in teachers' guides, materials, and a practice app for students.

Education begins with literacy. *The Writing Road to Reading* is the book and program behind THE SPALDING METHOD[®], which introduces students to the most fundamental pieces of the language through precise and intentional instruction. It is an educational philosophy and methodology consisting of time-tested principles of learning. Its structured literacy approach provides students with the tools to decode higher-level texts, becoming excellent analyzers, writers, and communicators. *The Writing Road to Reading* program is effective because it integrates four knowledge domains: reading process, reading development, skill learning, and effective instruction.



Central to the program is the emphasis on teaching students to read in the process of writing. Students spell a word by writing its sounds and reading aloud their own writing–thus the title, *The Writing Road to Reading*. Spalding's training courses, *Reading Foundations* and *Effective Strategies for Writing and Reading*, prepare teachers to implement *The Writing Road to Reading* program and become effective instructional and diagnostic decision-makers in their classrooms, employing explicit, sequential, and interactive instruction to engage students continually. The Spalding procedures employ a multimodal approach that enables students to engage multiple sensory channels of the brain (e.g., sight, sound, movement, and touch) to integrate and

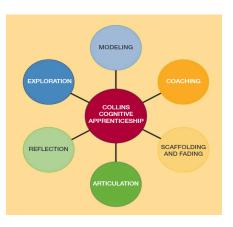
solidify learning and to prevent and overcome learning difficulties. Moreover, the focus on integrated instruction that connects speaking, writing, and reading throughout the program reinforces the structure of language.

Spalding's Research Basis

The Writing Road to Reading program approaches instruction through a Cognitive Apprenticeship lens, which is an instructional paradigm for teaching that is especially useful for teaching the foundational domains of reading and writing (Collins, 1989; Collins et al., 1991).



Modeling, coaching, and scaffolding sit at the core of cognitive apprenticeship as actions taken by the teacher to help students gain integrated skills through observation of and guided practice with an 'expert.' Articulation, reflection, and exploration are methods that involve the 'apprentice' taking ownership of their learning by engaging in active, metacognitive learning and building autonomy to apply their skills in new settings. Spalding prepares teachers to implement a cognitive apprenticeship design of instruction. They model, coach, scaffold, and then fade instruction, encouraging students to articulate, reflect on, and explore new



skills. In what follows, Spalding's research basis is outlined, reflecting this lens and other classic work embedded in the origins of Spalding, as well as more recent work that has informed continual updating to the program.

THE SPALDING METHOD[®] encourages the teaching behaviors of Modeling, Scaffolding, and Targeted Feedback.

Modeling

Modeling is a teaching strategy where teachers show students a task and think aloud to explain what they are doing and why (Harbour et al., 2015). This interactive process encourages students to observe, visualize, and conceptualize the processes necessary to accomplish cognitive tasks, such as reasoning, problem-solving, knowledge retrieval, and decision-making. Modeling benefits students by enabling them to observe and build a mental picture of the processes required to accomplish a task. Modeling spotlights expert solutions to problems, reduces student confusion, and reveals parts of a problem that are not typically seen (Collins, 1989; Harbour et al., 2015). Teachers can gauge student learning by encouraging them to articulate gained knowledge of content, reasoning, or problem-solving strategies (Collins et al., 1991).

Spalding's training courses prepare teachers to implement Spalding's *The Writing Road to Reading* program by encouraging teachers to model across the curriculum. For example, during spelling lessons, teachers model precise pronunciation of each new phonogram,

Model	T=Teacher	S = Studen
Segmenting Sounds		
T: Words are made up of individual sounds. Let's talk about the	word street.	
T: Listen as I segment this word /s/ /t/ /r/ /ē/ /t/.		
Counting Sounds		
T: Watch and listen as I count the sounds in the word street.		
T: /s/ /t/ /r/ /ē/ /t/ (T is increasing fingers while saying sounds.)		
T: There are 5 sounds in the word street.		
Blending Sounds		
T: Listen as I blend the sounds /s/ /t/ /r/ /ē/ /t/, street.		

specific formations of features and letters, and precise pronunciation and formation of each word in Spelling Dictation. Modeling in this way encourages students to conceptualize and visualize the spelling process, resulting in students becoming better spellers overall.



Because modeling helps students understand how to approach the task at hand, Spalding teachers use modeling across various lessons throughout instruction. For example, Spalding teachers also use modeling when introducing sentence construction, demonstrating the correct usage of unfamiliar and/or difficult spelling words. In composition lessons, Spalding teachers model thinking out loud while composing paragraphs of different text types. For literary appreciation lessons, Spalding teachers model thinking out loud while cachers model thinking out loud while elements of different types of writing. For listening (then reading) comprehension lessons, Spalding teachers model metacognitive processes aloud for students. In each instance, student learning is enhanced because students are privy to teacher demonstration and expert solutions to problems, which can reduce confusion and increase success in literacy activities.

Scaffolding and Targeted Feedback

Through scaffolding, teachers can guide, prompt, and provide targeted, corrective feedback while a student performs a task. Scaffolded support begins after the teacher offers one or more clear, specific models of each new skill. Scaffolding is one of the ways that teachers coach students to bring their performance closer to that of the teacher (Collins et al., 1991). Providing targeted spoken or visual feedback gives students the correct response or continued opportunities to complete the same task successfully (Fyfe et al., 2022). Students benefit from specific, corrective feedback because they can use it to immediately improve their performance on that task and during subsequent trials (Fyfe et al., 2022). It's worth noting that this modeling, scaffolding, and fading model of instruction is similar to the 'I Do, You Do, We Do' approach of the gradual release model (Webb et al., 2019).

Spaldinq

Procedure for Introducing Phonograms with Handwriting

- Teacher shows card and says sound(s).
- Students repeat sound(s).
- · Teacher gives cue, word, and/or language rule.
- · Teacher says sound(s) and models writing phonogram.
- Teacher asks questions to check students' understanding.
- Students sound softly just before they write. (Students do not repeat cue/word.)

Spalding's training courses prepare teachers to coach and then scaffold and fade instruction in alignment with THE SPALDING METHOD[®]. Through coaching and scaffolding, students are given targeted, actionable, immediate feedback to help them reflect and revise their thinking throughout the lesson. For example, during oral

phonogram reviews in spelling lessons, teachers provide targeted feedback by saying the sounds correctly as soon as a phonogram is mispronounced. During written phonogram reviews when learning is new, teachers provide immediate and targeted feedback by displaying each phonogram immediately after students write it so errors can be corrected quickly. Teachers coach and scaffold students through unfamiliar words throughout spelling dictation to ensure precise

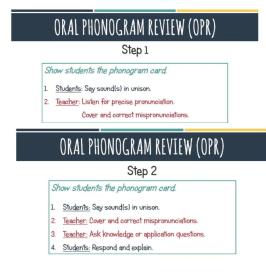


pronunciation, spelling, and rule application. In integrated spelling/writing lessons, teachers scaffold by prompting students as they compose oral sentences and providing specific, immediate feedback when grammar or word sequence is incorrect. In text structure lessons, teachers scaffold by thinking aloud as students determine text type. By scaffolding lessons and providing immediate corrective feedback, students can immediately revise their work, leading to improved performance across literacy activities. Teachers provide fewer scaffolded supports as students advance their skills, helping them take over their learning and build independence.

THE SPALDING METHOD[®] encourages the instructional focuses of Speech-to-Print, Feature & Letter Recognition, and Orthographic Knowledge & Statistical Learning.

Speech-to-Print

In a speech-to-print approach, student learning moves from the spoken word to the printed word (Moats, 2020). By starting with sounds and moving to print, this approach helps students connect spoken language they are already familiar with or have heard before with visual word forms. Moving from sounds to print helps ingrain the architecture to decode more complex letter patterns and sequences, resulting in a deeper understanding of language (Moats, 2020). Explicitly teaching sounds and words and talking about that learning ensures that students learn to read and write (Moats, 2020).



In Spalding's *The Writing Road to Reading* program, students are taught a speech-to-print approach to help them access the alphabetic code. The alphabetic principle is an understanding that the English language is a code of logical and predictable relationships between letters and spoken words, and there is a hierarchical order in which students learn word properties related to that code (Moats, 2020). Students start by learning that words are made up of individual sounds, with an emphasis on building their phonemic awareness. Students are encouraged to practice identifying individual sounds within words by orally segmenting the words. During phonogram

instruction, students learn that phonemes are represented by letters or letter combinations (graphemes). Students are taught all common phonograms—a term derived from the Greek words 'phono' (sound) and 'gram' (writing)—along with letter formation (handwriting). A core practice in THE SPALDING METHOD involves written phonogram review, where teachers connect the phoneme to its corresponding letter or letters, and students practice accurately connecting speech sounds to their written symbols using a multimodal approach incorporating handwriting



instruction. Students also engage in spelling dictation, where they segment unfamiliar words by each phonogram for one-syllable words or by syllable for multisyllabic words. They then sound and write the phonograms needed to accurately spell the unfamiliar word using a multimodal approach. As such, in both written phonogram review and spelling dictation, students practice integrating their knowledge of how letters sound, look, and are formed in the physical action of handwriting. By breaking words apart orally and putting them back together in written form, students form a deeper understanding of spelling and the English language overall, leading to increased literacy outcomes.

"The core reading subskill is forming connections between speech and print. More technically, this comes down to connections between specific speech units called phonemes and specific letters that represent them."

– Farnham-Diggory

Feature & Letter Recognition

Feature recognition is the ability to distinguish vertical, diagonal, and horizontal lines, as well as curves (Reutzel et al., 2017). Of course, letters are made up of these various features. Before learning to decode, students start to recognize the features of letters (Adams, 2011). The parts of the brain specialized for distinguishing lines and curves are activated by looking at print, and the visual system analyzes each letter into these elementary features rather than as holistic patterns (Farnham-Diggory, 1992; Reutzel et al., 2017). Therefore, to be fluent in recognizing letters, students need to be familiar with the distinctive features of each letter (Adams, 1990). Feature recognition leads to letter recognition, or the ability to group features into patterns and automatically recognize letters as wholes. Training students to look for the relevant contrasts between letters has been shown to increase their ability to recognize and distinguish between them (Adams, 1990). Letter recognition is important to word recognition and a gateway to early reading (Adams, 2011; Reutzel et al., 2017).

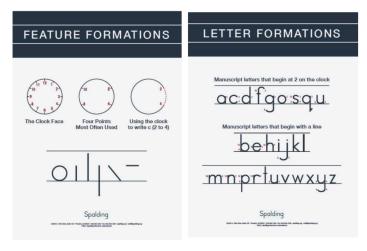
Reading and writing are interwoven skills, so integrating practice with reading and writing letters helps build foundational skills for overall literacy development (Graham et al., 2012). The very act of handwriting activates the brain's language areas, demonstrating a link between handwriting and other aspects of language learning, including reading, writing, and spelling (Graham et al., 2000; James & Engelhardt, 2012). Handwriting also strengthens brain systems that play a role in reading acquisition and ultimately relates to students' ability to read and write fluently (Graham et al., 2000; James & Engelhardt, 2012; Vinci-Booher & James, 2020), especially as it relates to students' understanding of letters and their letter recognition.

In Spalding's *The Writing Road to Reading* program, students are explicitly taught feature and letter recognition while practicing handwriting. First, students are taught to use six features of



letters to write the 26 manuscript letters, followed by repeated practice with these features. To

help students understand the features of letters, the instruction uses a consistent dialogue and images referring to an analog clock for the location specificity of each feature. This handwriting instruction is followed by daily practice of forming lower-case letters during written phonogram reviews. To assist with recall, students explain which features are used to form each letter. This explicit teaching and practice of writing letters encourages the link between handwriting and other intertwined aspects of literacy to improve students' reading.



Orthographic Knowledge & Statistical Learning

As students are explicitly taught and have practice with how sounds connect to written words and the features of written letters, they build up their orthographic knowledge. Orthographic knowledge refers to the mental representations of word spellings and knowledge about spelling patterns and rules (Squires & Wolter, 2016). In other words, orthographic knowledge is understanding what speech "looks like" in a given language. When orthographic knowledge is explicitly and systematically taught, students' spelling and reading skills improve (Squires & Wolter, 2016). Learning rules about common spatial placements of letters enables a reader to recognize or anticipate where particular letters are likely to be located using knowledge of both the alphabetic principle and advanced orthography (Farnham-Diggory, 1992; Squires & Wolter, 2016).

After students have access to enough of the alphabetic code, they can start applying their knowledge and continue building it through practice with real words during reading. Statistical learning in literacy is the recognition of regular relationships between letters and sounds which, when taught, allows students to use probabilistic reasoning to decode and predict spelling based on their experience (Apfelbaum et al., 2013; Elleman et al., 2018). Students can learn these regularities through exposure to highly similar words or more variable words (Apfelbaum et al., 2013). Statistical learning contributes to students' early literacy skills, such as word segmentation, understanding of orthographic mapping, letter-sound correspondence, and the overall development of reading, spelling, and vocabulary (Elleman et al., 2018; Spencer et al., 2015).





In Spalding's *The Writing Road to Reading* program, students build their orthographic knowledge in several ways to help unite spoken sounds with their written forms. For example, besides phonogram practice and spelling dictation, students are taught to expect certain letters and letter

Children are taught to expect certain letters and letter combinations to occur in specific places and to differentiate the *"legal"* from *"illegal"* position of letters in print. For example, *ai*, *oi*, and *ui* do not occur at the end of English words.

pay	
paint	

combinations to occur in patterns within words and general rules that govern those patterns. For example, *ai*, *oi*, and *ui* do not occur at the end of English words, and the letter *y* most frequently occurs at the ends of words. Students are explicitly taught 29 rules that govern pronunciation, spelling, and language use. Importantly, the rules are never memorized by rote; rather, those that apply to pronunciation and

placement of phonograms are taught and practiced in context within the sequence of instruction,

allowing students to learn and apply them when they are needed to spell a word. During spelling dictation, students can then apply their knowledge of rules to help them accurately spell new, unfamiliar words. Students are also taught during spelling dictation to identify the base word first to predict and assist in the spelling of derived words. Then, in word analysis, students practice applying the rules to unfamiliar words and articulating the reasoning in their own words. By furnishing students with enough orthographic knowledge to get started, students are encouraged to use statistical prediction to continually strengthen their decoding and spelling skills and improve overall literacy success.

DESCRIPTION RULE 5: i and y usually say /i/, but may say /i/ at the end of a syllable

THE SPALDING METHOD[®] encourages the student behaviors of Spaced Practice to the Point of Automaticity and Reflection & Application.

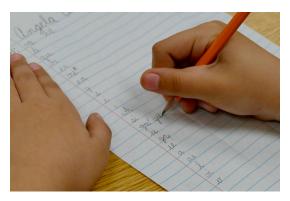
Spaced Practice to the Point of Automaticity

Once students have been explicitly taught during initial instruction, they need lots of practice to consolidate their learning. Spaced practice is one of the most effective ways to promote consolidation, which involves distributing practice across time rather than concentrating on learning all at once (Bloom & Shuell, 1981; Carpenter et al., 2022; Latimier et al., 2021). In practice, this looks like coming back to content days and weeks later rather than covering it and moving on. Spaced practice leads to improved long-term retention because students can retrieve the information from memory, requiring them to think more deeply as they reactivate the information and apply it in new contexts (Carpenter et al., 2012; Latimier et al., 2021). Spaced practice shows robust effects across content areas and age ranges (Gluckman et al., 2014). When teachers use a



spaced learning strategy, teachers revisit and review previously taught concepts and provide multiple opportunities for continued practice (Bloom & Shuell, 1981; Carpenter et al., 2022).

Using a spaced learning strategy to teach new skills encourages students to practice to the point of automaticity. To achieve automaticity, skills must be overlearned to a point where a student's brain is reprogrammed to perform the skill quickly and accurately (Cooper et al., 2022; Farnham-Diggory, 1992). Achieving automaticity is important because when skills become automatic, students' working memory is freed up to focus on new learning (Cooper et al., 2022; Farnham-Diggory, 1992). Spaced, repeated practice of literacy skills over time leads to automaticity, resulting in the opportunity for students to complete higher-order reading tasks and improve literacy success overall (Cooper et al., 2022).



Spalding's training courses prepare teachers to implement *The Writing Road to Reading*, in which students extensively practice perceptual, motor, and knowledge routines across spelling, writing, and reading lessons. Each week, the lessons are structured to introduce new concepts (Monday, Tuesday, Wednesday), review previously taught concepts (Thursday), and assess learned skills (Friday). Within spelling lessons, students review

phonograms across

days to move toward saying and writing them automatically and practice with a list of the most common words used in the English language until they can read them fluently and spell them accurately. In reading lessons, students read aloud daily from short passages and decodable readers to develop fluency, identify attributes of quality literature, and identify elements of text structure. For additional practice with phonograms, students can also use the Phonograms by SEI app to come back to previous content or build their familiarity with phonograms they had struggled with during lessons. Across all Spalding spelling, writing, and reading lessons, students return to previous material in different contexts days, weeks, and months after the initial introduction to solidify their learning. In Spalding's The Writing Road to Reading program, literacy practice is spaced across time to help students move beyond accuracy toward automaticity, allowing students to focus on new learning.





Reflection & Application

Students eventually need to learn how to continue their learning more independently—in other words, they need to build metacognitive and self-regulated learning skills. To do so, students need to be able to reflect on their learning and apply their learning in new contexts. One way to build self-regulated learning is through self-assessment, where students reflect on their work and compare their performance on tasks, problem-solving skills, and thinking processes across time (Collins et al., 1991). Revisiting their previous performances enables students to make small adjustments that will ultimately improve their reading and writing (Collins et al., 1991; Panadero et al., 2017). As students practice applying their newfound skills, they can take ownership of their learning by becoming self-regulated, discerning learners, who can determine when to use which strategies they have in their toolkit (Dent & Koenka, 2016; Dignath & Büttner, 2008). Developing strong self-regulation skills early on links to strong decoding skills, reading comprehension, phonological awareness, and vocabulary knowledge, supporting essential foundational skill development (Skibbe et al., 2019).

WRITTEN PHONOGRAM REVIEW (WPR)

4) Teacher analyzes/evaluates his/her handwriting based on the focus
 5) Students analyze/evaluate their handwriting based on the focus

6) Students articulate explanations with a partner or the whole group

Steps for Handwriting Focus:

1) Teacher sets a focus

2) Teacher models the focus3) Students practice the focus

Throughout Spalding's *The Writing Road to Reading* program, students have opportunities to explain their thinking, reflect on their work, and apply skills to new domains. For example, in spelling lessons, students articulate and explain their thinking about how to form individual letters and how language rules apply to spelling words. Students are also encouraged to reflect in spelling lessons by comparing their letter formation and

handwriting across time in previously written notebook sections. Similarly, in writing lessons,

students can reflect by comparing their daily writing to an exemplary model or previous writing. Grading rubrics also allow students to reflect and improve their writing before submitting the assignment to the teacher. As one way to support their application of skills and exploration in new domains, students are encouraged early on to engage in recreational reading, applying their decoding skills to read independently from short passages, decodable readers, and real text, such as library books of their choice or content area texts. Students can also apply their metacognitive monitoring skills by engaging in the five Spalding mental actions (e.g., monitoring comprehension, making connections, making predictions, reformatting, and mentally summarizing) to comprehend new texts and transition from *learning to read* to *reading to learn*. With so many





opportunities to reflect on their work and apply skills to new concepts, Spalding's *The Writing Road to Reading* program supports students to develop strong self-regulated learning skills leading to stronger reading comprehension and written pieces.

Existing Studies on Product Effectiveness

Spalding's *The Writing Road to Reading* training shows clear promise <u>across research studies</u> as an effective instructional approach to support students' literacy outcomes. In particular, studies show that Spalding schools often outperform local, state, and district averages in language arts, with some schools ranking as top performers in their state. Further, Dr. Robert Aukerman's validation in 1984 and additional longitudinal studies indicate that Spalding schools significantly improve reading and spelling, even for students with dyslexia and other learning challenges. Before the pandemic school closures, these consistently positive findings collectively underscore the program's ability to significantly boost literacy skills. A recent correlational study added to this evidence base by examining how the depth and breadth of Spalding's *The Writing Road to Reading* training within a school impacted 3rd to 5th-grade students' literacy proficiency on state assessments over two years. Across all grades and both years, Spalding schools had a significantly higher Median Percent Passing than Non-Spalding schools, ranging from small to medium effect sizes. Across grades, Spalding schools maintained growth and continued improving from 2022 to 2023. See the <u>report</u> here.

Conclusion

Spalding's *The Writing Road to Reading* training helps teachers know how to flexibly and diagnostically support their students. The training promotes teachers' ability to systematically model, scaffold, and provide feedback that directs and corrects to support students' literacy development. When teachers are trained in Spalding's *The Writing Road to Reading* program, they learn about the connections between reading and writing and are encouraged to deliver instruction that integrates the two. The focus of the program is to teach students the tools of how to sound out a word so that students build autonomy and self-regulated learning skills to read on their own—the focus is not on sight words or memorization but on empowering students to learn the patterns and structure of the English language and practice applying them. With an instructional focus that helps students understand the most common sounds, how they map to letter shapes, and support to recognize patterns, students become equipped to break down words on their own. With spaced practice over time to develop automaticity and opportunities to reflect, self-assess, and apply their new skills, students are encouraged to figure out how and when their skills are relevant and take ownership of their learning, with the ultimate goal of enabling them to become critical thinkers and lifelong learners.



References

Adams, M. J. (1990). Beginning to read: Thinking and learning about print.

- Adams, M. J. (2011). The relation between alphabetic basics, word recognition, and reading. In S.J. Samuels & A.E. Farstrup (Eds.), What Research Has to Say About Reading Instruction (pp. 4-24). Newark, DE: International Reading Association.
- Apfelbaum, K. S., Hazeltine, E., & McMurray, B. (2013). Statistical learning in reading: variability in irrelevant letters helps children learn phonics skills. *Developmental Psychology*, 49(7), 1348.
- Bloom, K. C., & Shuell, T. J. (1981). Effects of massed and distributed practice on the learning and retention of second-language vocabulary. *The Journal of Educational Research*, 74(4), 245-248.
- Carpenter, S. K., Cepeda, N. J., Rohrer, D., Kang, S. H., & Pashler, H. (2012). Using spacing to enhance diverse forms of learning: Review of recent research and implications for instruction. *Educational Psychology Review, 24,* 369-378.
- Carpenter, S. K., Pan, S. C., & Butler, A. C. (2022). The science of effective learning with spacing and retrieval practice. *Nature Reviews Psychology, 1*(9), 496–511. <u>https://doi.org/10.1038/s44159-022-00089-1</u>
- Collins, A. (1989). *Technical Report No. 474 Cognitive Apprenticeship And Instructional Technology*. BBN Laboratories. <u>https://eric.ed.gov/?id=ED331465</u>
- Collins, A., Seely Brown, J., & Holum, A. (1991). Cognitive Apprenticeship. *American Educator*, *Winter*. <u>https://www.aft.org/ae/winter1991/collins_brown_holum</u>
- Cooper, S., Hebert, M., Goodrich, J. M., Leiva, S., Lin, X., Peng, P., & Nelson, J. R. (2022). Effects of Automaticity Training on Reading Performance: A Meta-Analysis. *Journal of Behavioral Education*, 33, 23–52. <u>https://doi.org/10.1007/s10864-022-09480-7</u>
- Dent, A. L., & Koenka, A. C. (2016). The Relation Between Self-Regulated Learning and Academic Achievement Across Childhood and Adolescence: A Meta-Analysis. *Educational Psychology Review, 28*(3), 425–474. <u>https://doi.org/10.1007/s10648-015-9320-8</u>
- Dignath, C., & Büttner, G. (2008). Components of fostering self-regulated learning among students. A meta-analysis on intervention studies at primary and secondary school level. *Metacognition and Learning, 3*(3), 231–264. <u>https://doi.org/10.1007/s11409-008-9029-x</u>
- Elleman, A. M., Steacy, L. M., & Compton, D. L. (2018). The Role of Statistical Learning in Word Reading and Spelling Development: More Questions Than Answers. *Scientific Studies of Reading*, 23(1), 1–7. <u>https://doi.org/10.1080/10888438.2018.1549045</u>
- Farnham-Diggory, S. (1992). *Cognitive Processes in Education*. 2nd Ed. (pp. 298-310). New York: Harper Collins Publishers.
- Fyfe, E. R., Borriello, G. A., & Merrick, M. (2022). A developmental perspective on feedback: How corrective feedback influences children's literacy, mathematics, and problem solving. *Educational Psychologist*, 58(3), 1–16. <u>https://doi.org/10.1080/00461520.2022.2108426</u>
- Gluckman, M., Vlach, H. A., & Sandhofer, C. M. (2014). Spacing simultaneously promotes multiple forms of learning in children's science curriculum. *Applied Cognitive Psychology*, 28(2), 266-273.
- Graham, S., Harris, K. R., & Fink, B. (2000). Is handwriting causally related to learning to write? Treatment of handwriting problems in beginning writers. *Journal of Educational Psychology*, 92(4), 620.



- Graham, S., McKeown, D., Kiuhara, S., & Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology, 104*(4), 879. https://psycnet.apa.org/record/2012-18075-001
- Harbour, K. E., Evanovich, L. L., Sweigart, C. A., & Hughes, L. E. (2015). A Brief Review of Effective Teaching Practices That Maximize Student Engagement. *Preventing School Failure: Alternative Education for Children and Youth*, 59(1), 5–13. <u>https://doi.org/10.1080/1045988x.2014.919136</u>
- James, K. H., & Engelhardt, L. (2012). The effects of handwriting experience on functional brain development in pre-literate children. *Trends in Neuroscience and Education, 1*(1), 32-42.
- Latimier, A., Peyre, H., & Ramus, F. (2021). A Meta-Analytic Review of the Benefit of Spacing out Retrieval Practice Episodes on Retention. *Educational Psychology Review, 33*(3), 959–987. <u>https://doi.org/10.1007/s10648-020-09572-8</u>
- Moats, L. C. (2020). Teaching Reading" Is" Rocket Science: What Expert Teachers of Reading Should Know and Be Able to Do. *American Educator*, 44(2), 4.
- Panadero, E., Jonsson, A., & Botella, J. (2017). Effects of self-assessment on self-regulated learning and self-efficacy: Four meta-analyses. *Educational Research Review*, 22(1), 74–98. <u>https://doi.org/10.1016/j.edurev.2017.08.004</u>
- Reutzel, P., Mohr, K. A., & Jones, C. D. (2017). Exploring the relationship between letter recognition and handwriting in early literacy development. *Journal of Early Childhood Literacy*, *19*(3), <u>https://doi.org/10.1177/1468798417728099</u>
- Spencer, M., Kaschak, M. P., Jones, J. L., & Lonigan, C. J. (2015). Statistical learning is related to early literacy-related skills. *Reading and Writing*, *28*, 467-490.
- Squires, K. E., & Wolter, J. A. (2016). The Effects of Orthographic Pattern Intervention on Spelling Performance of Students With Reading Disabilities. *Remedial and Special Education*, 37(6), 357–369. <u>https://doi.org/10.1177/0741932516631115</u>
- Skibbe, L. E., Montroy, J. J., Bowles, R. P., & Morrison, F. J. (2019). Self-regulation and the development of literacy and language achievement from preschool through second grade. *Early Childhood Research Quarterly*, 46, 240–251. https://doi.org/10.1016/j.ecresq.2018.02.005
- Vinci-Booher, S., & James, K. H. (2020). Visual experiences during letter production contribute to the development of the neural systems supporting letter perception. *Developmental Science*, *23*(5), e12965.
- Webb, S., Massey, D., Goggans, M., & Flajole, K. (2019). Thirty-five years of the gradual release of responsibility: scaffolding toward complex and responsive teaching. *The Reading Teacher, 73*(1), 75-83.



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