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Drops in the Bucket® Reading

RESEARCH FOUNDATION AND INSTRUCTIONAL FRAMEWORK

Supporting Reading Achievement Through Retrieval Practice, Spaced Review, Interleaving, Fluency, Vocabulary, Comprehension, and Data-Informed Instruction

Research Foundation and Evidence-Based Instructional Framework

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Executive Summary

Drops in the Bucket® reading/language arts is a structured literacy reinforcement system designed to strengthen reading achievement through daily review, cumulative practice, retrieval opportunities, spaced repetition, vocabulary development, reading comprehension activities, and ongoing progress monitoring. The instructional framework incorporates multiple principles supported by educational research, including retrieval practice, distributed practice, explicit instruction, formative assessment, language development, and Multi-Tiered Systems of Support (MTSS).

Through consistent exposure to previously taught reading skills and concepts, students develop greater automaticity, reading fluency, vocabulary knowledge, comprehension abilities, and confidence as readers. The program is designed to complement core literacy instruction by providing systematic review, targeted intervention support, and differentiated learning opportunities for diverse student populations.

Flexible implementation options support Tier 1 classroom instruction, Tier 2 targeted intervention, and Tier 3 intensive support. By combining research-supported instructional practices with daily opportunities for review and application, *Drops in the Bucket*® reading/language arts is designed to strengthen retention, address learning gaps, and promote long-term reading achievement.

The program supports standards-based literacy instruction, intervention services, learning recovery efforts, and data-informed decision making while providing educators with practical tools for reinforcing essential reading skills and concepts.

Key Research Foundations at a Glance

Table 1. Key Research Foundations at a Glance

Connecting Literacy Research to Daily Reading Achievement

RESEARCH FOUNDATION	KEY RESEARCHER(S)	MAJOR FINDING	APPLICATION WITHIN DROPS IN THE BUCKET® READING
Retrieval Practice	Roediger & Karpicke (2006); Dunlosky et al. (2013)	Actively retrieving information strengthens retention and long-term learning.	Daily review activities require students to recall previously learned reading skills and concepts.
Spaced Practice (Distributed Learning)	Ebbinghaus (1885/1913); Cepeda et al. (2006)	Learning is retained more effectively when review opportunities are distributed over time.	Reading skills and concepts are revisited throughout the instructional sequence rather than practiced only during initial instruction.
Interleaving	Rohrer (2012); Dunlosky et al. (2013)	Mixing different types of tasks improves discrimination, strategy selection, and transfer of learning.	Students encounter varied reading tasks, vocabulary activities, language skills, and comprehension exercises within lessons.
Cumulative Review	Rosenshine (2012); Dunlosky et al. (2013)	Ongoing review of previously learned material promotes retention and reduces forgetting.	Previously taught reading skills continue to appear throughout the program, reinforcing long-term retention.
Reading Fluency	National Reading Panel (2000); Rasinski (2012)	Fluency supports comprehension, automaticity, and reading confidence.	Repeated exposure to reading skills helps strengthen automatic recognition and application of literacy skills.
Vocabulary Development	Beck, McKeown & Kucan (2013); Nagy & Scott (2000)	Vocabulary knowledge is a strong predictor of reading comprehension.	Students repeatedly encounter and apply vocabulary through daily literacy practice and review.
Reading Comprehension	Duke & Cartwright (2021); RAND Reading Study Group (2002)	Comprehension develops through strategic thinking, language knowledge, and application of reading skills.	Students engage with passages and activities that reinforce comprehension, analysis, and meaning-making.
Formative Assessment	Black & Wiliam (1998)	Frequent assessment and feedback improve instructional decision making and student outcomes.	Assessment and progress-monitoring resources help educators identify strengths, needs, and growth over time.
Progress Monitoring	Black & Wiliam (1998)	Student performance data can guide intervention and instructional adjustments.	Progress-monitoring tools support data-informed instructional planning and intervention efforts.
Multi-Tiered Systems of Support (MTSS)	National Center on Intensive Intervention; National Reading Panel (2000)	Early identification and targeted intervention improve literacy outcomes.	Flexible implementation supports Tier 1 reinforcement, Tier 2 intervention, and Tier 3 intensive support.
Science of Reading Alignment	National Reading Panel (2000); Shanahan (2020)	Structured literacy practices support reading achievement and long-term literacy development.	The program reinforces foundational literacy skills through systematic review, practice, and application.
Evidence-Based Instructional Practices	Every Student Succeeds Act (2015)	Educational programs should be grounded in research-supported instructional practices.	The program incorporates multiple evidence-informed learning principles identified in literacy research.

Drops in the Bucket® Reading integrates research-supported instructional principles to provide meaningful practice, reinforcement, and feedback—helping students build confidence, strengthen literacy skills, and achieve long-term reading success.

Table 1. Key Research Foundations for Drops in the Bucket®

How Research Informs the Instructional Design

Drops in the Bucket® reading/language arts is designed to reinforce literacy development through daily review, cumulative practice, retrieval opportunities, vocabulary development, reading comprehension activities, and ongoing progress monitoring. The instructional framework incorporates multiple research-supported principles from cognitive science, literacy education, and evidence-based instructional practice. These principles have been associated with improved retention, stronger reading outcomes, and long-term literacy achievement (Dunlosky, Rawson, Marsh, Nathan, & Willingham, 2013; National Reading Panel, 2000).

Research has consistently demonstrated that students learn more effectively when they are provided with opportunities to actively retrieve previously learned information rather than simply reread or review material. Retrieval practice strengthens memory and supports long-term retention of knowledge and skills (Roediger & Karpicke, 2006). Within *Drops in the Bucket*® reading/language arts, students regularly revisit previously taught literacy concepts, helping reinforce learning and maintain access to important reading skills over time.

The instructional design also incorporates principles of spaced practice and distributed learning. Research suggests that learning is retained more effectively when review opportunities are distributed across time rather than concentrated within a single instructional period (Cepeda, Pashler, Vul, Wixted, & Rohrer, 2006). Skills and concepts introduced earlier in the instructional sequence continue to appear throughout the program, providing students with repeated opportunities to strengthen retention and reduce forgetting.

In addition, the program reflects the research-supported practice of interleaving. Interleaved learning opportunities expose students to multiple types of tasks and concepts within a single lesson rather than isolating one skill at a time. This approach encourages students to discriminate among concepts, select appropriate strategies, and transfer learning to new situations (Rohrer, 2012; Dunlosky et al., 2013). Daily lessons include a variety of literacy activities that require students to engage with multiple reading and language skills.

Cumulative review is another key component of the instructional framework. Educational research has demonstrated that ongoing review of previously learned material helps strengthen retention and support long-term learning (Rosenshine, 2012). Within *Drops in the Bucket*® reading/language arts, previously taught concepts continue to be reinforced throughout the instructional sequence, helping students build stronger and more durable literacy skills.

Research also highlights the importance of reading fluency, vocabulary development, and reading comprehension as essential components of literacy achievement. Reading fluency supports automatic word recognition and allows students to devote greater cognitive resources to comprehension (National Reading Panel, 2000; Rasinski, 2012). Vocabulary knowledge is strongly associated with reading comprehension and overall academic success (Beck, McKeown, & Kucan, 2013; Nagy & Scott, 2000). Effective reading instruction also develops students' ability to construct meaning from text, apply background knowledge, and use strategic thinking to comprehend increasingly complex material (Duke & Cartwright, 2021; RAND Reading Study Group, 2002).

The program further incorporates formative assessment and progress-monitoring practices that support data-informed instructional decision making. Ongoing assessment enables educators to

identify strengths, monitor growth, address learning needs, and provide targeted instructional support (Black & Wiliam, 1998). These practices align closely with Multi-Tiered Systems of Support (MTSS), which emphasize early identification of learning needs, targeted intervention, and continuous monitoring of student progress.

Taken together, these research-supported principles inform the instructional design of *Drops in the Bucket*® reading/language arts. The program integrates retrieval practice, spaced review, interleaving, cumulative review, reading fluency development, vocabulary instruction, reading comprehension support, formative assessment, progress monitoring, and MTSS-aligned implementation practices into a structured framework designed to reinforce literacy learning and support long-term reading achievement.

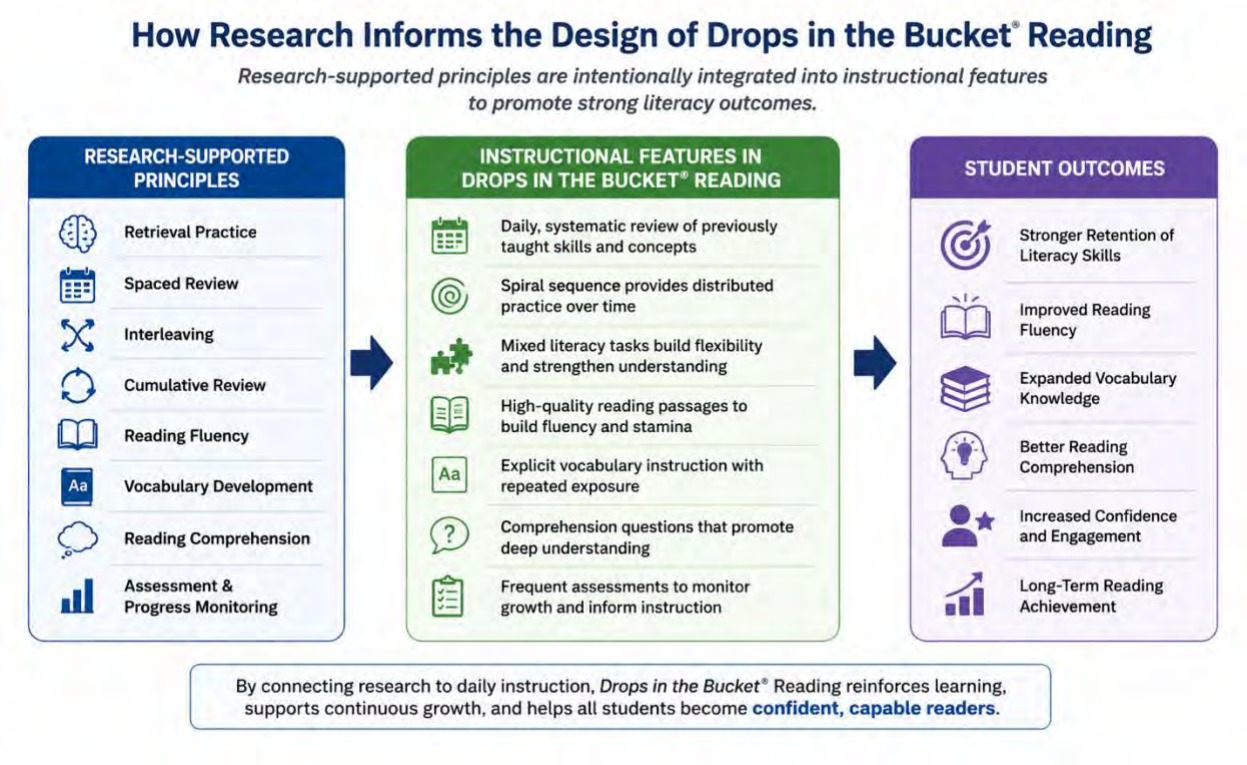


Figure 1. How Research Informs the Design of Drops in the Bucket® *Reading*

Research-Supported Design Principles

The instructional framework of *Drops in the Bucket*® reading/language arts reflects multiple principles identified in cognitive science, literacy research, and evidence-based instructional practice. These research-supported principles provide the foundation for the instructional design features discussed throughout this document and have been associated with improved student learning outcomes (Dunlosky et al., 2013; National Reading Panel, 2000).

The program is designed to reinforce literacy development through systematic review, repeated practice, vocabulary development, reading comprehension activities, and ongoing opportunities for assessment and progress monitoring. Together, these instructional elements support the development of strong foundational literacy skills while helping students retain and apply previously learned knowledge over time.

The following research-supported principles serve as the foundation of the instructional framework:

- Retrieval Practice
- Spaced Review and Distributed Practice
- Interleaved Learning Opportunities
- Cumulative Review
- Explicit Instruction
- Reading Fluency Development
- Vocabulary Development
- Reading Comprehension

• Formative Assessment

• Progress Monitoring

• Data-Informed Instruction

• Multi-Tiered Systems of Support (MTSS)

Research suggests that students benefit when important literacy concepts and skills are revisited regularly rather than taught in isolation and then abandoned. Through daily reinforcement, cumulative review, and opportunities to engage with multiple literacy skills, students strengthen retention, improve reading proficiency, and develop greater confidence as readers. The instructional principles described throughout this document reflect established findings from literacy research and learning science and provide the framework through which *Drops in the Bucket*® reading/language arts supports long-term literacy achievement.

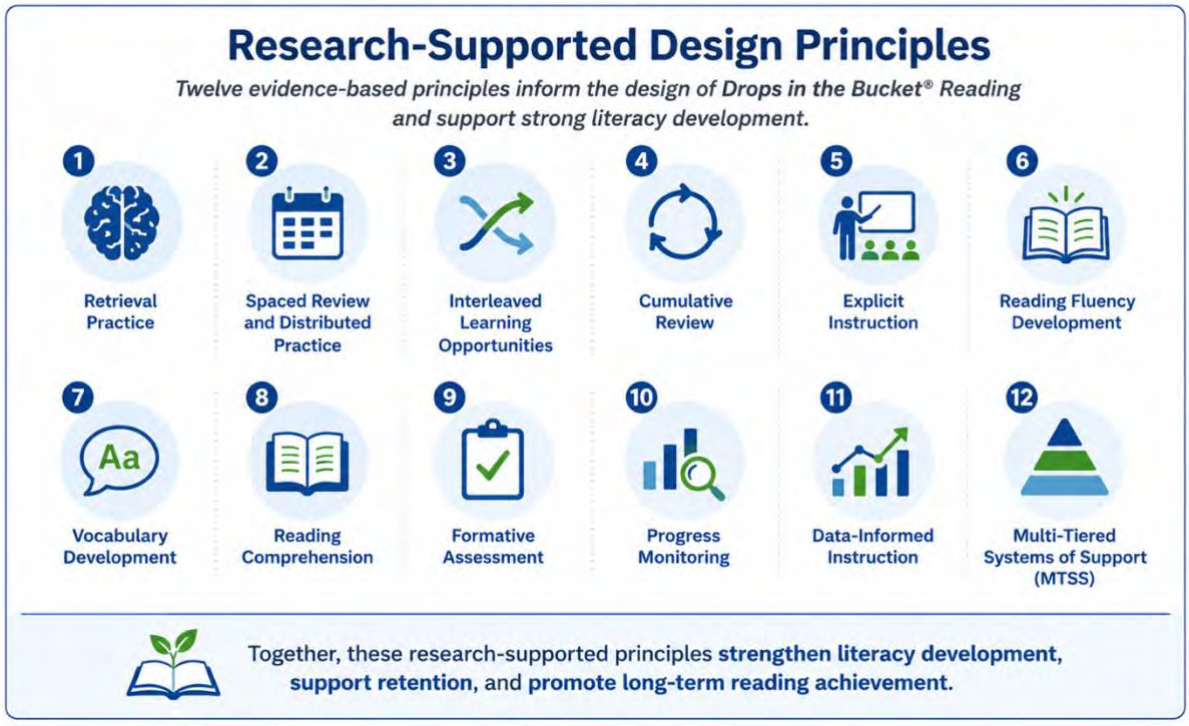


Figure 2. Research-Supported Design Principles

The Need for Daily Reading Reinforcement

Reading development is a cumulative process that requires students to build, retain, and apply a wide range of literacy skills over time. Foundational skills such as phonics, vocabulary, fluency, language comprehension, and reading comprehension serve as building blocks for future learning and academic success. Because these skills develop gradually and are interconnected, students benefit from ongoing opportunities to revisit and reinforce previously learned concepts throughout the school year.

Research has consistently demonstrated that learning is strengthened when students engage with information repeatedly over time rather than only during initial instruction. One of the earliest and most influential findings in the science of learning is that memory weakens when information is not revisited. Ebbinghaus (1885/1913) demonstrated that forgetting occurs rapidly following initial learning and that retention improves when opportunities for review and reinforcement are provided. Although Ebbinghaus's work focused on memory, subsequent educational research has supported the importance of systematic review and retrieval opportunities in promoting long-term learning (Dunlosky et al., 2013).

These challenges are particularly evident in reading instruction. Students are expected to apply previously learned skills while simultaneously acquiring new literacy knowledge. A vocabulary word, phonics pattern, comprehension strategy, or language concept that appears mastered immediately after instruction may become less accessible if students are not provided with opportunities to revisit and apply that learning. As a result, educators frequently encounter situations in which students require additional review of concepts that were previously taught.

Research has shown that repeated opportunities to retrieve and apply knowledge strengthen learning and improve retention (Roediger & Karpicke, 2006). Daily review provides students with regular opportunities to access previously learned information, reinforcing memory and helping important literacy skills remain available for future learning. These opportunities are particularly important because reading achievement depends not only on acquiring new skills but also on maintaining access to foundational knowledge developed over time.

The importance of ongoing reinforcement is reflected in major literacy research syntheses. The National Reading Panel (2000) identified fluency, vocabulary, and comprehension as essential components of reading achievement and emphasized the importance of sustained practice and application. Similarly, vocabulary research has demonstrated that students often require multiple exposures to words and concepts before they become part of long-term knowledge (Beck, McKeown, & Kucan, 2013; Nagy & Scott, 2000). Reading comprehension also improves when students have repeated opportunities to apply strategies, build background knowledge, and engage with increasingly complex texts (Duke & Cartwright, 2021).

Learning opportunities distributed across time have been shown to improve retention and reduce forgetting. Cepeda et al. (2006) found that students retain information more effectively when review opportunities are spaced across weeks and months rather than concentrated into a single instructional period. These findings suggest that students benefit when important literacy skills are revisited regularly rather than taught once and then abandoned.

Daily literacy reinforcement provides a practical mechanism for supporting long-term reading achievement. Through repeated opportunities to review, retrieve, apply, and connect previously learned concepts, students strengthen retention, improve fluency, expand vocabulary knowledge,

and develop stronger reading comprehension. Ongoing reinforcement also helps educators identify learning gaps before they become significant barriers to future learning.

The instructional framework of *Drops in the Bucket*® reading/language arts reflects these research-supported principles by providing structured opportunities for students to revisit and apply previously learned literacy skills on a consistent basis. Through daily review and cumulative reinforcement, students are encouraged to strengthen retention, build confidence, and maintain access to essential reading skills as new learning occurs.

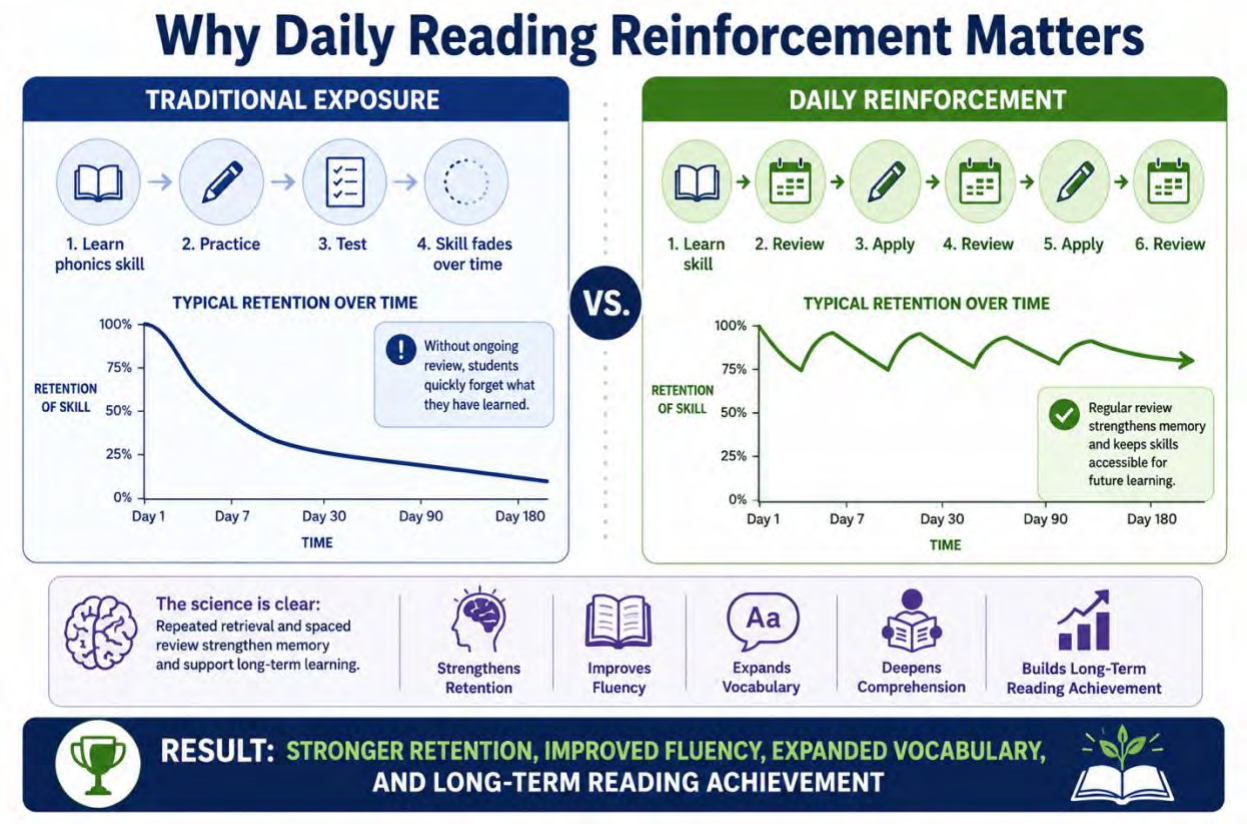


Figure 3. Why Daily Reading Reinforcement Matters

Instructional Design of *Drops in the Bucket*® Reading

Drops in the Bucket® reading/language arts is designed to provide students with consistent opportunities to revisit, apply, and strengthen previously learned literacy skills throughout the school year. The instructional framework is based on the understanding that literacy development occurs over time and that students benefit from regular engagement with both new and previously taught concepts. Rather than concentrating practice within isolated instructional units, the program incorporates systematic review and reinforcement to support long-term retention and reading achievement.

The program utilizes a structured daily review format in which students complete a brief set of literacy activities designed to reinforce a variety of reading and language skills. This approach allows students to engage with reading on a regular basis while minimizing instructional disruption and preserving time for core literacy instruction. Daily practice opportunities help students maintain access to previously learned knowledge while building connections to newly introduced concepts.

A distinguishing feature of the program is its spiral review structure. Reading and language concepts are revisited throughout the instructional sequence rather than practiced exclusively during a single instructional unit. Previously taught skills continually appear in subsequent lessons, providing students with ongoing opportunities to retrieve and apply literacy knowledge. This cumulative approach helps reinforce learning and supports the development of reading fluency, vocabulary knowledge, language proficiency, and reading comprehension.

The program also incorporates distributed practice by extending opportunities for review across weeks and months of instruction. Skills introduced earlier in the year are systematically revisited, allowing students to strengthen retention and reduce the likelihood of forgetting. In addition, lessons include interleaved learning opportunities in which students encounter multiple literacy tasks within a single practice session. Depending upon the instructional level, students may engage with vocabulary, reading comprehension, language conventions, word study, grammar, critical thinking, and reading passages within the same lesson.

To support data-informed instruction, *Drops in the Bucket*® reading/language arts includes assessment and progress-monitoring components that help educators identify strengths, monitor growth, and target areas requiring additional support. These resources may be used to inform instructional decisions and guide intervention efforts within a Multi-Tiered System of Support (MTSS) framework.

The flexible design of the program supports implementation across a variety of instructional settings, including Tier 1 classroom reinforcement, Tier 2 targeted intervention, and Tier 3 intensive support. Educators may also use the program within tutoring programs, after-school learning opportunities, summer learning initiatives, and other supplemental instructional settings.

Through its emphasis on daily review, cumulative reinforcement, vocabulary development, reading comprehension, retrieval practice, and progress monitoring, *Drops in the Bucket*® reading/language arts provides a structured framework designed to support long-term literacy development. The following sections examine the research-supported instructional principles that inform the design of the program, including retrieval practice, spaced review, interleaving,

cumulative review, reading fluency, vocabulary development, reading comprehension, formative assessment, and progress monitoring.

Figure 4. Daily Review Structure

Program Structure and Sample Learning Activities

Drops in the Bucket® reading/language arts is organized around a consistent daily review format that provides students with repeated opportunities to revisit previously taught literacy skills while simultaneously engaging with new learning. Each lesson incorporates a variety of literacy strands within a single page, allowing students to practice multiple concepts through structured, cumulative review.

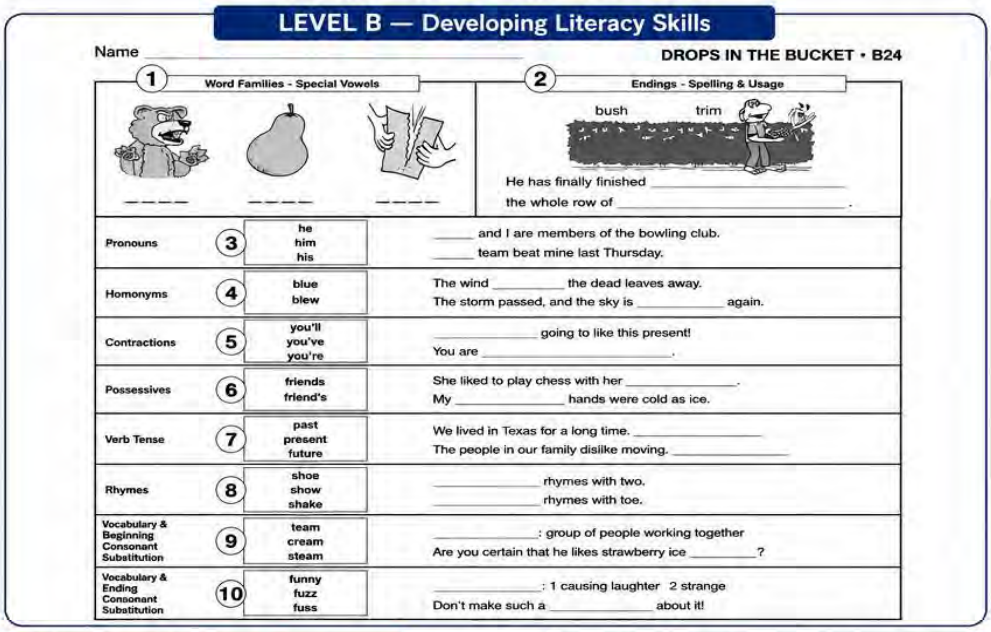
The consistent instructional format is intended to reduce procedural demands and increase opportunities for independent practice. Because students encounter familiar lesson structures on a daily basis, instructional time may be focused on literacy development, vocabulary acquisition, reading comprehension, language skills, and reinforcement of previously learned concepts rather than repeated explanation of directions and procedures.

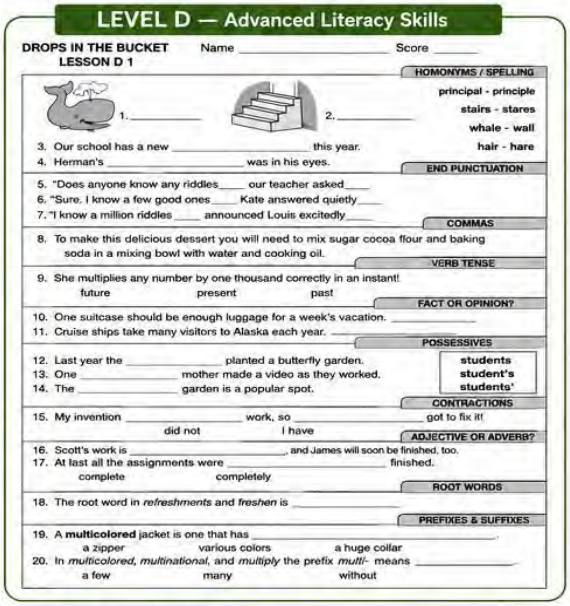
Across instructional levels, lessons provide opportunities to strengthen vocabulary knowledge, reading comprehension, language conventions, grammar, word study, critical thinking, and other essential literacy skills. Skills are revisited systematically over time, providing students with multiple opportunities to retrieve and apply previously learned knowledge.

The sample pages shown below illustrate how the program incorporates cumulative review, distributed practice, retrieval opportunities, and varied literacy tasks within a single lesson. The examples demonstrate the progression of skills across instructional levels while maintaining a consistent instructional framework designed to support long-term retention and reading achievement.

Program Structure and Sample Learning Activities

The examples below illustrate the progression of literacy skills across instructional levels while maintaining a consistent framework of cumulative review, vocabulary development, language skills, and reading comprehension.





One consistent structure. Many skills. *Strong readers for life.*

Figure 5. Drops in the Bucket® Pages

Research Foundation: Retrieval Practice

Retrieval practice is one of the most extensively studied learning principles in cognitive science and educational research. Retrieval practice occurs when learners actively recall previously learned information from memory rather than simply rereading, reviewing, or re-exposing themselves to content. Research has consistently demonstrated that the act of retrieving information strengthens memory and improves long-term retention of knowledge and skills (Roediger & Karpicke, 2006).

Historically, educators often viewed quizzes, questions, and practice activities primarily as methods for measuring learning. More recent research has demonstrated that these activities also serve as powerful learning opportunities. When students actively retrieve information from memory, they strengthen neural pathways associated with that knowledge, making future recall more likely and improving long-term retention (Dunlosky et al., 2013).

Roediger and Karpicke (2006) found that students who engaged in retrieval activities retained significantly more information over time than students who spent an equivalent amount of time rereading instructional materials. This phenomenon, often referred to as the "testing effect," has been replicated across multiple grade levels, content areas, and learning environments. The findings suggest that opportunities to retrieve information from memory are not simply assessments of learning but are themselves an important part of the learning process.

The benefits of retrieval practice are particularly relevant to literacy instruction. Reading achievement depends upon students' ability to access previously learned knowledge and apply it to new reading tasks. Students must recall phonics patterns, vocabulary meanings, grammar

conventions, comprehension strategies, and background knowledge while simultaneously processing new information. When these foundational skills can be accessed efficiently, students are better positioned to comprehend text, make connections, and engage in higher-order thinking.

Research indicates that retrieval practice strengthens both factual knowledge and conceptual understanding. Students who regularly retrieve previously learned information are more likely to retain that information over extended periods and transfer learning to new situations (Dunlosky et al., 2013). In literacy instruction, this means that students who repeatedly recall vocabulary, language concepts, reading strategies, and word patterns are more likely to apply those skills successfully when encountering increasingly complex texts.

Retrieval practice also supports reading fluency and automaticity. As students repeatedly access previously learned literacy skills, those skills become more readily available and require less conscious effort to use. This increased automaticity allows students to devote greater cognitive resources to meaning-making and comprehension rather than basic skill recall (National Reading Panel, 2000).

The instructional design of *Drops in the Bucket*® reading/language arts incorporates retrieval practice through daily opportunities for students to revisit and apply previously taught literacy concepts. Rather than focusing exclusively on newly introduced content, lessons regularly require students to recall and use skills learned during previous instructional experiences. Vocabulary, grammar, language conventions, word study, and reading comprehension skills reappear throughout the instructional sequence, creating repeated opportunities for active retrieval.

These retrieval opportunities occur within a cumulative review framework that encourages students to access knowledge from long-term memory on a consistent basis. By repeatedly recalling and applying previously learned literacy concepts, students strengthen retention, improve skill transfer, and build confidence as readers. Through daily review and cumulative reinforcement, *Drops in the Bucket*® reading/language arts applies the research-supported principle of retrieval practice to support long-term literacy development and reading achievement.

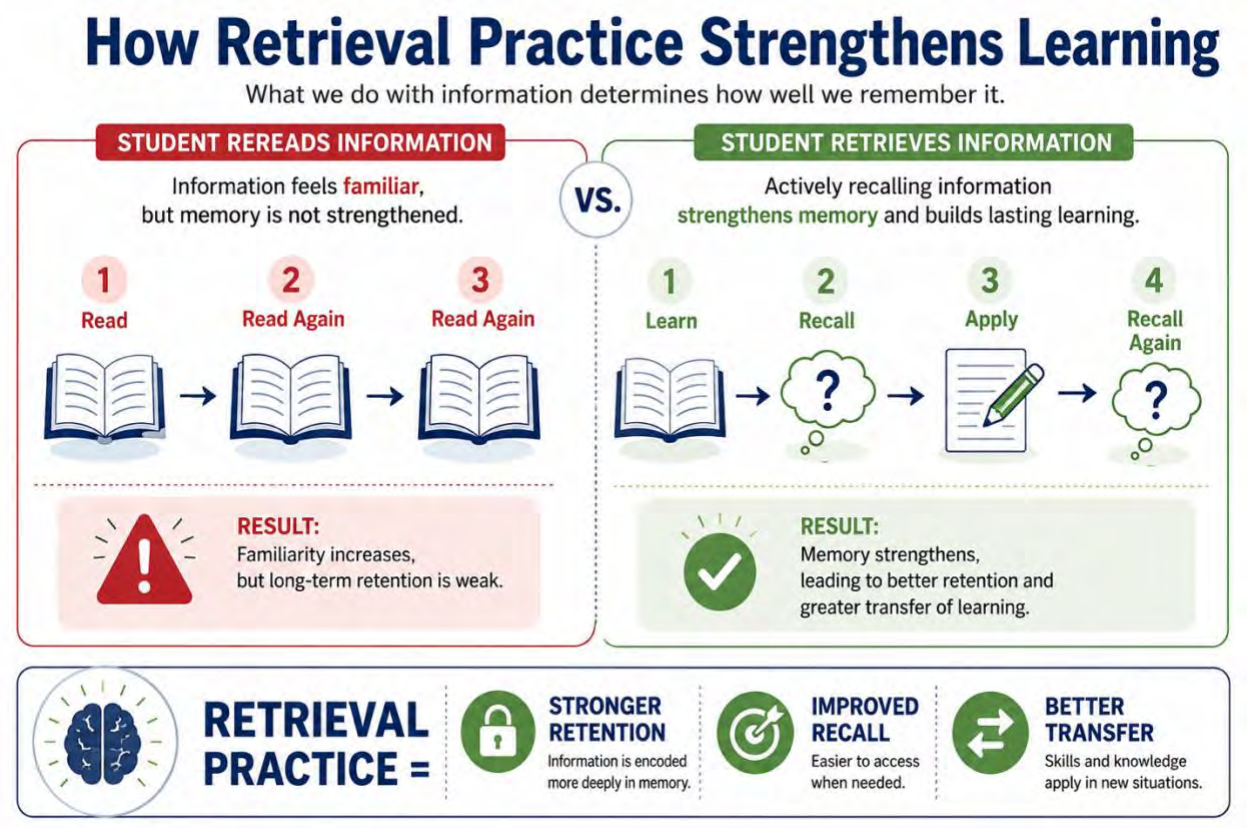


Figure 6. How Retrieval Practice Strengthens Learning

Research Foundation: Spaced Practice and Distributed Learning

Spaced practice, also referred to as distributed learning, is an instructional principle in which learning opportunities are distributed across time rather than concentrated within a single instructional session. Research has consistently demonstrated that students retain information more effectively when review and practice opportunities are spaced over days, weeks, or months rather than delivered in a single period of intensive instruction (Cepeda et al., 2006).

The foundation for modern research on spaced practice can be traced to the work of Hermann Ebbinghaus (1885/1913), whose studies of memory demonstrated that forgetting occurs rapidly following initial learning. Ebbinghaus found that information is retained more effectively when learners are provided with opportunities to revisit material over time. His findings established the basis for what is now commonly referred to as the spacing effect, one of the most consistently supported findings in learning science.

Subsequent research has repeatedly confirmed the benefits of spaced learning. In a comprehensive review of distributed practice studies, Cepeda et al. (2006) found that learning opportunities distributed across time consistently produced stronger long-term retention than massed practice, often referred to as "cramming." The researchers concluded that spacing review opportunities across instructional intervals improves the durability of learning and helps students maintain access to previously learned information.

The benefits of spaced practice are particularly important within literacy instruction. Reading achievement requires students to retain and apply a wide range of skills, including phonics, vocabulary, grammar, language conventions, comprehension strategies, and background knowledge. Many of these skills develop gradually and require repeated opportunities for practice and application before they become firmly established. Without ongoing review, students may struggle to retain and apply concepts learned during earlier instructional experiences.

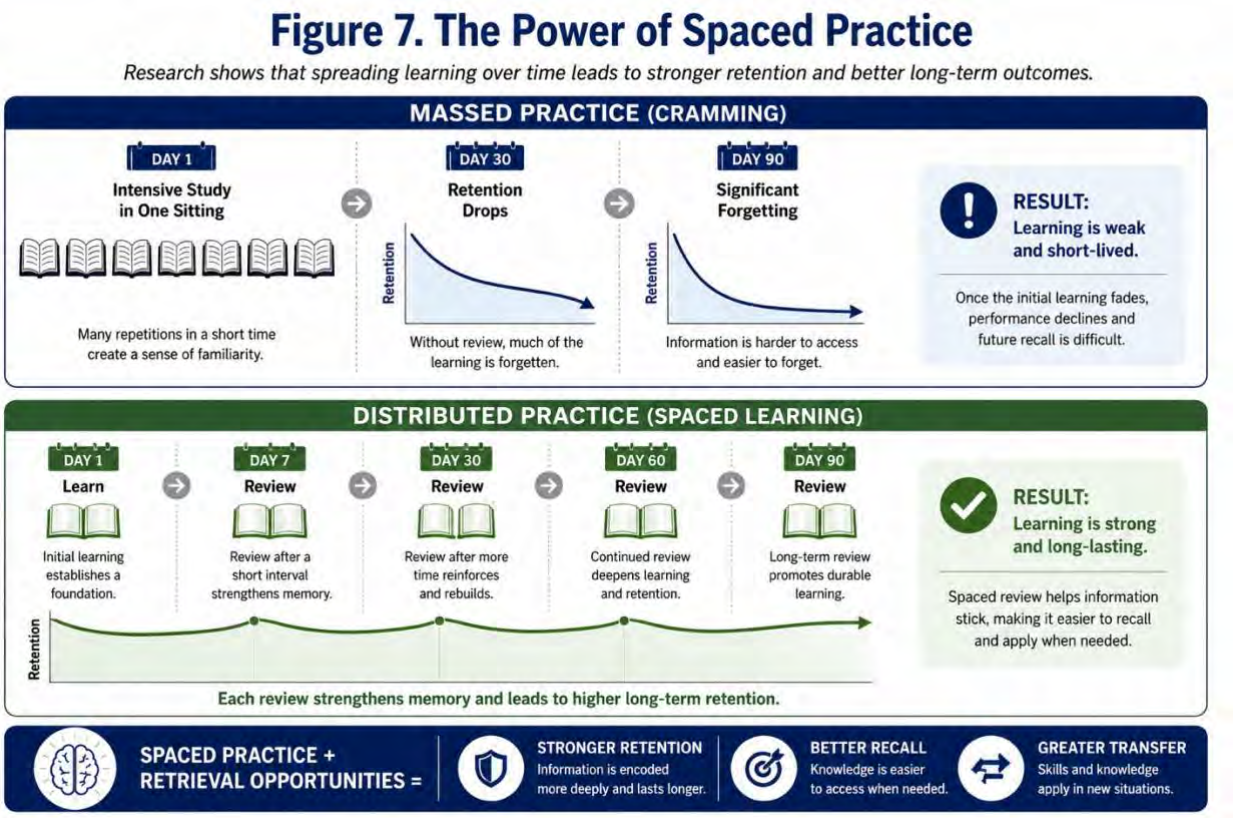
Spaced learning opportunities help strengthen retention by requiring students to revisit information after some forgetting has occurred. This process encourages students to reconstruct and strengthen memory pathways, leading to improved long-term retention and greater accessibility of knowledge when needed (Dunlosky et al., 2013). Rather than relying on repeated practice within a single lesson or unit, spaced practice distributes learning opportunities across multiple instructional encounters.

Vocabulary development provides a particularly clear example of the value of spaced practice. Research suggests that students often require multiple exposures to words and concepts before those words become part of long-term vocabulary knowledge (Beck, McKeown, & Kucan, 2013; Nagy & Scott, 2000). Similarly, reading comprehension strategies, grammar concepts, and language conventions are more likely to be retained when students encounter them repeatedly across time rather than during isolated instructional events.

The instructional design of *Drops in the Bucket*® reading/language arts incorporates spaced practice by systematically revisiting previously taught literacy concepts throughout the instructional sequence. Skills introduced during earlier lessons continue to appear in subsequent

lessons, providing students with repeated opportunities to retrieve, apply, and strengthen learning. This distributed review structure allows students to engage with important literacy concepts across weeks and months rather than within isolated units of instruction.

Because previously learned concepts continue to reappear throughout the program, students receive ongoing opportunities to reinforce learning and strengthen retention. This approach reflects the research-supported principle that learning is more durable when practice opportunities are distributed across time. Through consistent review and cumulative reinforcement, *Drops in the Bucket*® reading/language arts applies the principles of spaced practice and distributed learning to support long-term literacy development and reading



achievement.

Figure 7. The Power of Spaced Practice

Research Foundation: Interleaving

Interleaving is an instructional practice in which multiple skills, concepts, or problem types are mixed together during learning rather than practiced in isolated blocks. Unlike traditional instructional approaches that focus on one skill at a time before moving to the next, interleaved learning opportunities require students to identify, select, and apply different strategies as they encounter varied tasks. Research has demonstrated that this approach can improve retention, discrimination among concepts, and the transfer of learning to new situations (Rohrer, 2012; Dunlosky et al., 2013).

Traditional instructional models often rely on blocked practice, in which students complete numerous examples of the same skill before moving on to another topic. Although blocked practice may create the appearance of rapid learning, research suggests that students frequently struggle to retain and apply learning over time when instruction is organized exclusively in this manner (Rohrer, 2012). Interleaving introduces desirable difficulty by requiring students to determine which skill, strategy, or concept is appropriate for a given task.

Researchers have found that interleaving promotes stronger learning because students must continually retrieve prior knowledge and make distinctions among concepts. Rather than relying on repetitive procedures, students engage in deeper cognitive processing as they determine how to approach each new task (Dunlosky et al., 2013). This process strengthens long-term retention and improves the ability to transfer learning to unfamiliar situations.

The benefits of interleaving are particularly relevant within literacy instruction. Effective readers must coordinate multiple skills simultaneously while engaging with text. Vocabulary knowledge,

grammar, language conventions, comprehension strategies, word recognition, and background knowledge work together to support understanding. Reading rarely occurs in isolated skill categories; instead, successful literacy performance requires students to integrate multiple forms of knowledge within authentic reading situations.

Interleaved practice helps students develop flexibility in applying literacy skills. For example, students may encounter vocabulary activities, grammar tasks, reading comprehension questions, language conventions, and critical thinking opportunities within the same lesson. This variety encourages students to select and apply appropriate strategies while reinforcing connections among related literacy concepts.

Research also suggests that interleaving improves discrimination, or the ability to recognize differences among concepts and determine when particular strategies should be used (Rohrer, 2012). In literacy instruction, this may involve distinguishing among grammar rules, identifying appropriate word meanings within context, selecting comprehension strategies, or recognizing language patterns across different texts and activities.

The instructional design of *Drops in the Bucket*® reading/language arts incorporates interleaving by intentionally presenting students with a variety of literacy tasks within a single lesson. Rather than focusing exclusively on one skill area, lessons include opportunities to engage with vocabulary, reading comprehension, language skills, grammar, word study, and critical thinking activities. This structure encourages students to move among multiple literacy concepts while reinforcing previously learned knowledge.

Because students encounter varied literacy tasks on a regular basis, they are required to retrieve, apply, and integrate different forms of knowledge throughout the learning process. This approach reflects the research-supported principle of interleaving and helps support long-term retention, flexible thinking, and the transfer of literacy skills to new contexts. Through systematic exposure to varied literacy activities, *Drops in the Bucket*® reading/language arts applies interleaving as a means of strengthening reading achievement and supporting durable learning.

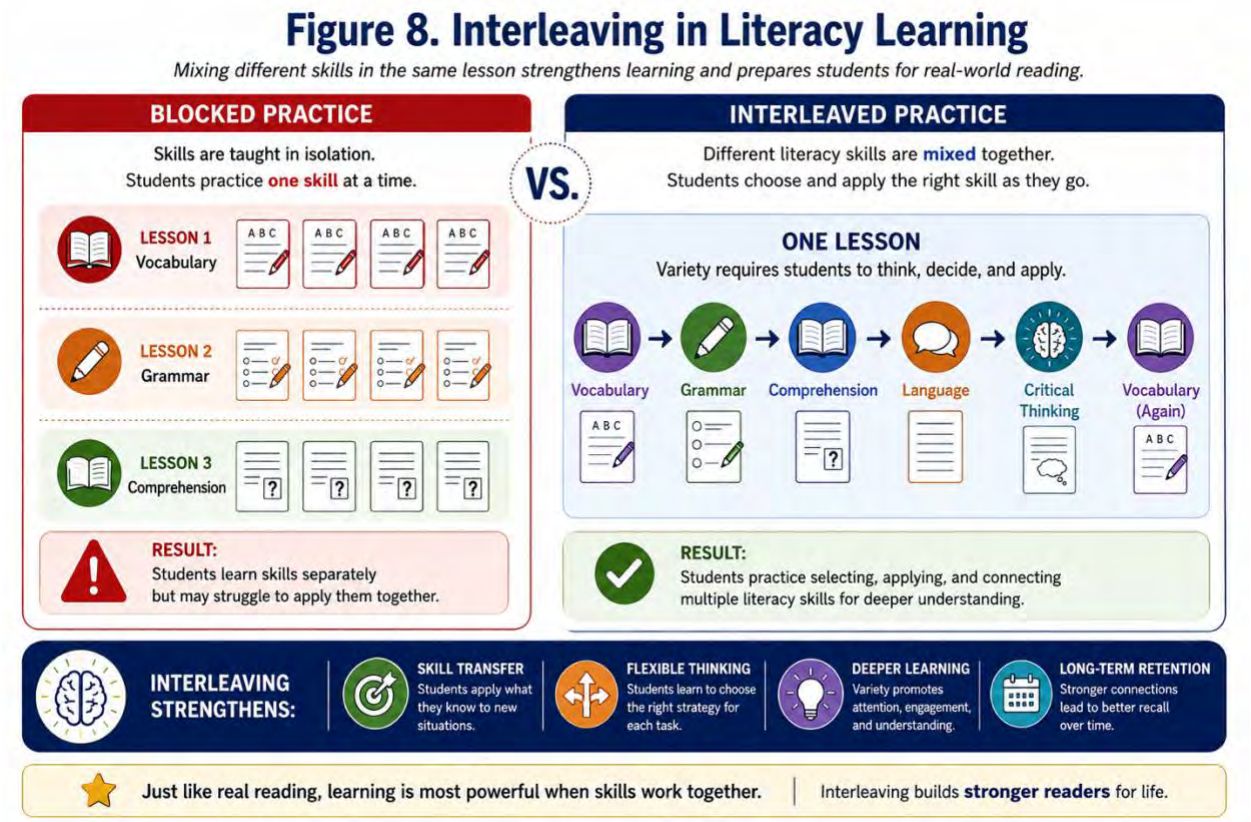


Figure 8. Interleaving vs. Blocked Practice in Literacy

Research Foundation: Cumulative Review

Cumulative review is an instructional practice in which previously learned concepts continue to be revisited and reinforced as new learning occurs. Rather than teaching a skill, assessing mastery, and moving on permanently, cumulative review provides ongoing opportunities for students to retrieve, apply, and strengthen prior learning over time. Research has consistently demonstrated that regular review of previously learned material supports retention, reduces forgetting, and contributes to long-term academic achievement (Rosenshine, 2012).

Learning is not a single event but an ongoing process that requires reinforcement and continued application. Students often demonstrate initial mastery of a skill immediately following instruction, yet may experience difficulty recalling or applying that skill weeks or months later if opportunities for review are limited. Educational research suggests that retention improves when students revisit important concepts regularly and engage with previously learned material across multiple instructional encounters (Dunlosky et al., 2013).

Cumulative review serves as an important mechanism for strengthening long-term memory. When students encounter previously taught concepts during later learning experiences, they are required to retrieve information from memory and reconnect it to new learning. This process reinforces neural pathways associated with the original learning and helps maintain access to knowledge over time (Roediger & Karpicke, 2006).

Rosenshine (2012) identified daily review and systematic cumulative practice as important elements of effective instruction. His Principles of Instruction emphasize the value of providing students with opportunities to revisit previously learned material on a regular basis. These review

opportunities help students maintain mastery of foundational skills while reducing the likelihood that earlier learning will be forgotten.

The benefits of cumulative review are particularly important within literacy instruction. Reading achievement depends upon the integration of numerous interconnected skills, including vocabulary, phonics, language conventions, reading fluency, comprehension strategies, and background knowledge. Because these skills build upon one another, students benefit when previously learned concepts continue to be reinforced as new concepts are introduced.

Vocabulary development provides a clear example of the value of cumulative review. Research indicates that students often require multiple exposures to words and concepts before they become part of long-term vocabulary knowledge (Beck, McKeown, & Kucan, 2013; Nagy & Scott, 2000). Similarly, comprehension strategies, grammar concepts, and language conventions are strengthened when students encounter them repeatedly across time and in varied contexts.

The instructional design of *Drops in the Bucket*® reading/language arts incorporates cumulative review as a central organizational feature. Previously taught literacy skills continue to appear throughout the instructional sequence, providing students with ongoing opportunities to retrieve and apply prior learning. Rather than isolating concepts within individual instructional units, the program systematically revisits important literacy skills through daily review activities and cumulative practice opportunities.

This approach helps students maintain access to previously learned knowledge while supporting connections between earlier and newly introduced concepts. Through consistent review and reinforcement, students are encouraged to develop stronger retention, improved literacy

proficiency, and greater confidence in applying reading skills across a variety of learning situations.

By embedding cumulative review throughout the instructional framework, *Drops in the Bucket*® reading/language arts reflects a research-supported approach to literacy learning that emphasizes long-term retention, durable understanding, and continuous reinforcement of essential reading skills.

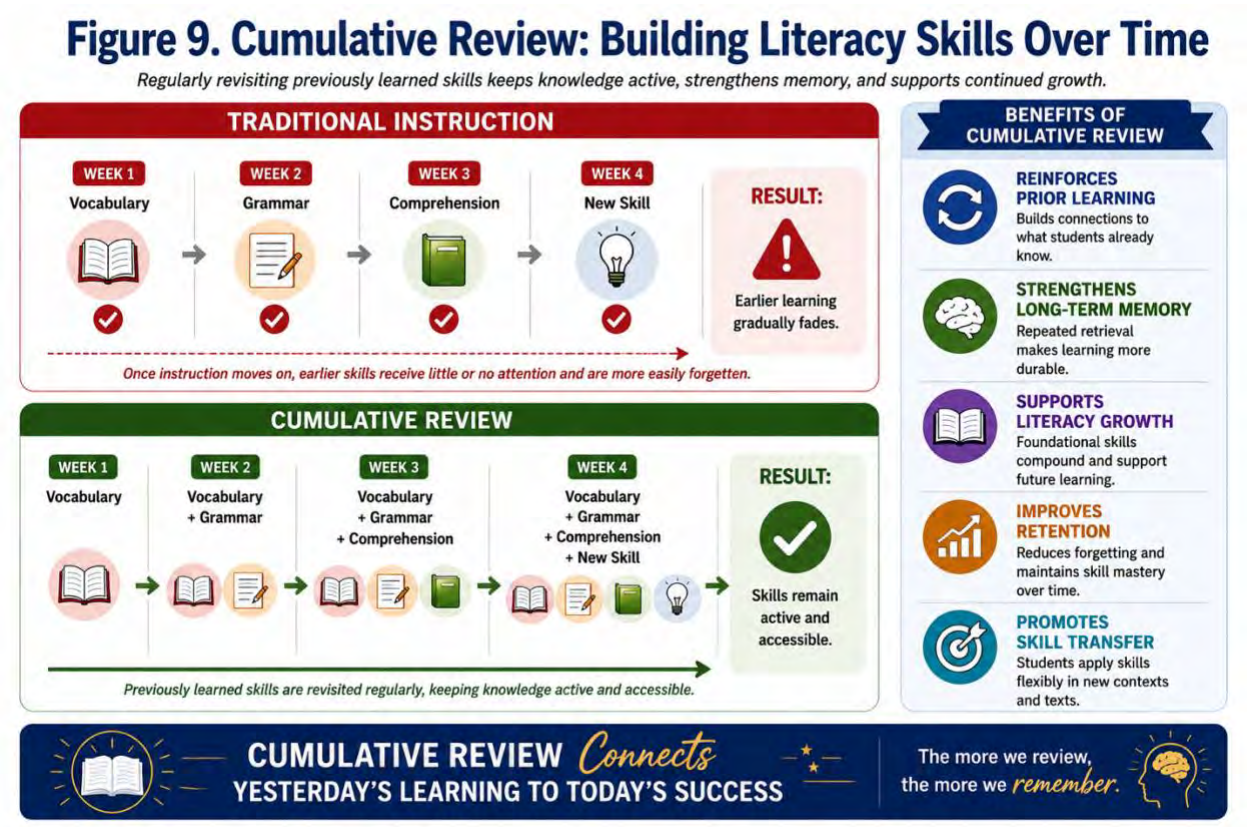


Figure 9. Cumulative Review vs Traditional Instruction

Research Foundation: Reading Fluency Development

Reading fluency is widely recognized as an essential component of literacy development and a critical contributor to reading achievement. Fluency refers to the ability to read text accurately, at an appropriate rate, and with meaningful expression. Fluent readers are able to recognize words efficiently and devote greater cognitive resources to understanding and interpreting text. Because fluency serves as a bridge between word recognition and comprehension, it plays an important role in supporting overall reading proficiency (National Reading Panel, 2000; Rasinski, 2012).

The National Reading Panel (2000) identified reading fluency as one of the key components of effective reading instruction. Their review of research concluded that students benefit from repeated opportunities to engage with text and practice reading skills. As fluency develops, students become more efficient readers and are better able to focus on constructing meaning rather than decoding individual words.

Researchers often describe fluency as consisting of three primary components: accuracy, rate, and prosody. Accuracy refers to the ability to correctly identify words while reading. Rate refers to the speed at which text is read. Prosody involves the use of appropriate expression, phrasing, and intonation that reflects understanding of the text. Together, these components contribute to reading proficiency and support successful comprehension (Rasinski, 2012).

The development of fluency is closely connected to the concept of automaticity. LaBerge and Samuels (1974) proposed that as readers become more proficient at recognizing words, less cognitive effort is required for decoding. This increased automaticity allows readers to devote

more attention to understanding, interpreting, and analyzing text. When foundational reading processes become automatic, comprehension is more likely to occur successfully.

Research has consistently demonstrated a strong relationship between fluency and reading comprehension. Students who read fluently are generally better able to focus on meaning because fewer cognitive resources are devoted to word recognition. Conversely, students who struggle with fluency may expend substantial effort decoding text, leaving fewer resources available for comprehension and higher-order thinking (National Reading Panel, 2000).

Fluency development requires ongoing opportunities to engage with text and apply previously learned literacy skills. Repeated encounters with vocabulary, language structures, and reading tasks help strengthen automaticity and improve reading efficiency. These opportunities also support confidence and motivation, both of which contribute to continued literacy growth.

The instructional design of *Drops in the Bucket*® reading/language arts supports fluency development through consistent daily engagement with literacy activities that require students to apply previously learned skills. Students regularly encounter vocabulary, language concepts, reading passages, and comprehension tasks that reinforce literacy knowledge and encourage automatic application of foundational skills. As concepts are revisited through cumulative review and distributed practice, students strengthen their ability to recognize, access, and apply literacy knowledge efficiently.

In addition, reading passages and comprehension activities provide opportunities for students to engage meaningfully with text while reinforcing previously learned concepts. Through daily

review, cumulative reinforcement, and ongoing literacy practice, the program supports the development of the automaticity and proficiency that contribute to fluent reading.

By providing structured opportunities for repeated engagement with literacy concepts, *Drops in the Bucket*® reading/language arts incorporates research-supported practices that help strengthen fluency development and support long-term reading achievement.

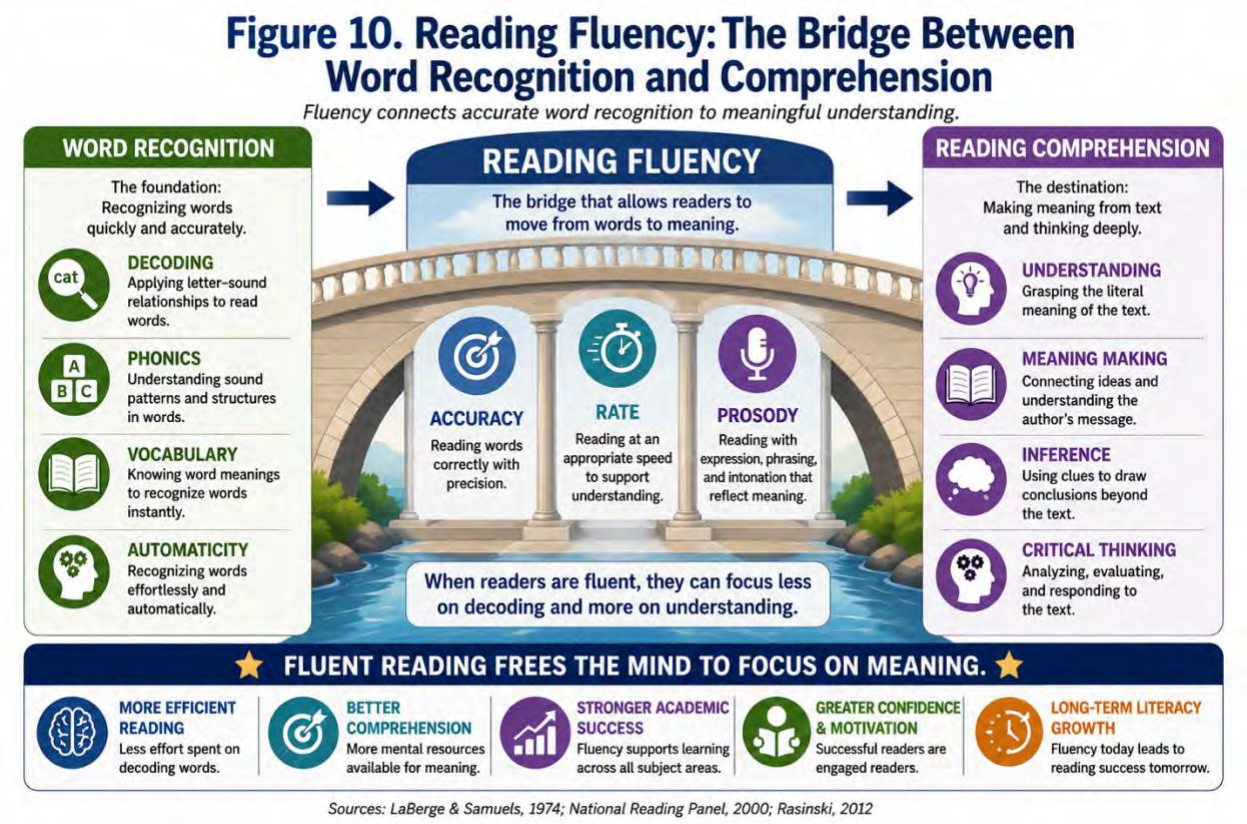


Figure 10. Reading Fluency: Connecting Words to Meaning

Research Foundation: Vocabulary and Language Development

Vocabulary and language development are essential components of literacy achievement and play a significant role in students' ability to understand, interpret, and communicate meaning. Vocabulary knowledge supports reading comprehension, academic achievement, oral language development, and written communication. Research has consistently demonstrated that students with stronger vocabularies are better equipped to comprehend text, acquire new knowledge, and engage successfully with increasingly complex academic content (Beck, McKeown, & Kucan, 2013; Nagy & Scott, 2000).

Vocabulary development is a gradual process that occurs through repeated exposure to words and language structures over time. Unlike skills that may be mastered through a limited number of instructional encounters, vocabulary knowledge often requires multiple opportunities for students to encounter, use, and apply words in meaningful contexts. Research suggests that students benefit from repeated interactions with vocabulary across varied situations and learning experiences (Beck et al., 2013).

Language development extends beyond the acquisition of individual words. Students must also develop an understanding of language structures, grammar, syntax, figurative language, word relationships, and the ways language conveys meaning. These language competencies contribute to reading comprehension and support students' ability to communicate effectively in both oral and written forms (Nagy & Scott, 2000).

Researchers have identified vocabulary knowledge as one of the strongest predictors of reading comprehension. Students who possess broader vocabularies are more likely to understand what they read because they can access the meanings of words encountered within text. Conversely, limited vocabulary knowledge may create barriers to comprehension, even when students possess adequate decoding skills (National Reading Panel, 2000).

Vocabulary and language knowledge also contribute to knowledge building and academic success across content areas. As students encounter increasingly complex texts in literature, science, social studies, and mathematics, they must draw upon both vocabulary knowledge and language understanding to construct meaning. Strong language foundations help students connect ideas, interpret information, and engage with academic content more effectively.

The development of vocabulary and language is supported through repeated exposure, meaningful application, and opportunities to connect new words and concepts to existing knowledge. Research indicates that students learn vocabulary more effectively when words are encountered multiple times and in varied contexts rather than through isolated memorization activities (Beck et al., 2013). Repeated encounters help strengthen understanding and increase the likelihood that vocabulary knowledge will become part of long-term memory.

The instructional design of *Drops in the Bucket*® reading/language arts supports vocabulary and language development through ongoing opportunities for students to engage with words, language structures, reading passages, and literacy activities. Vocabulary concepts, language conventions, grammar skills, and word relationships are revisited throughout the instructional sequence, providing students with repeated opportunities to strengthen understanding and application.

Through daily review, cumulative reinforcement, and varied literacy tasks, students regularly encounter language in meaningful contexts. These opportunities encourage students to retrieve previously learned vocabulary, apply language knowledge, and strengthen the literacy skills that support reading comprehension and communication. By embedding vocabulary and language development throughout the instructional framework, *Drops in the Bucket*® reading/language arts reflects research-supported practices associated with literacy growth and long-term reading achievement.

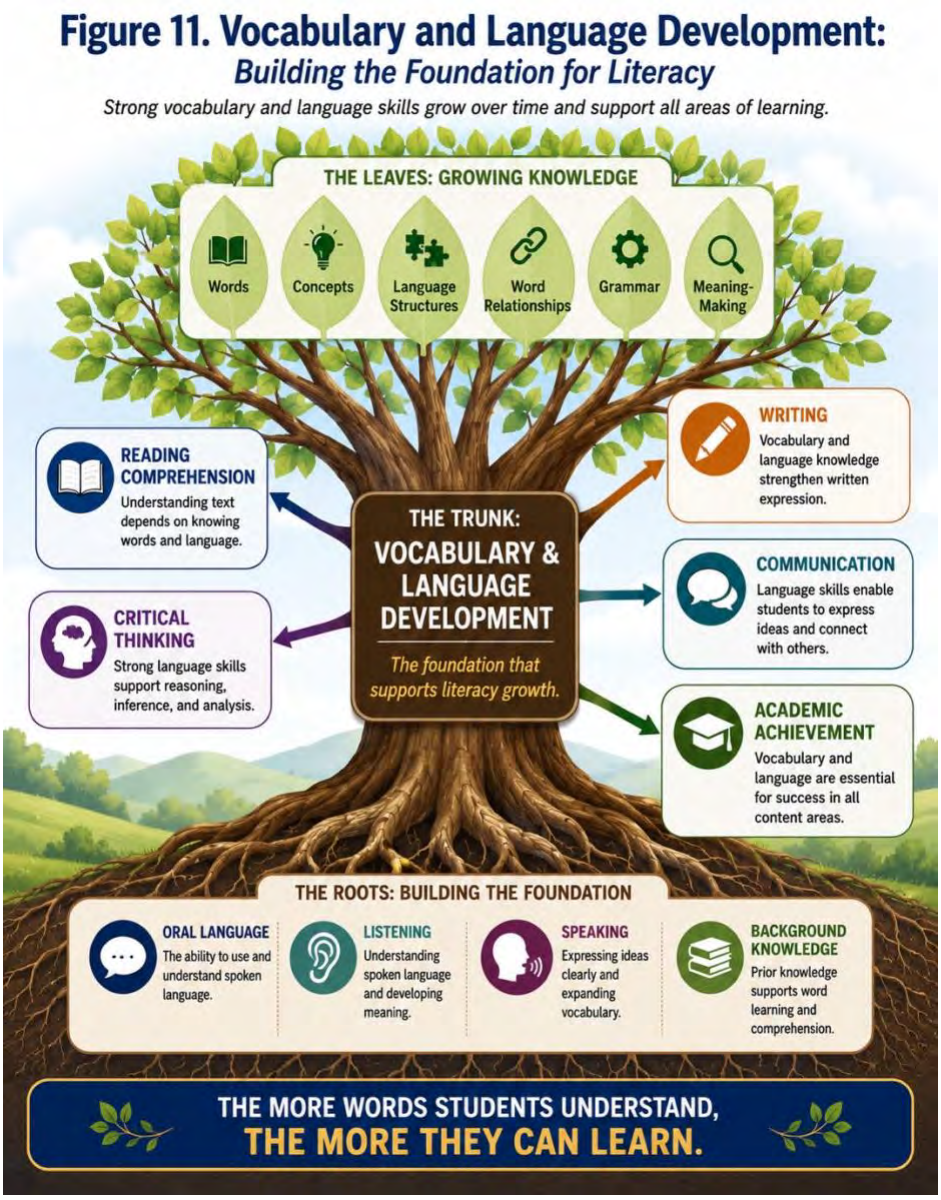


Figure 11. The More Words Students Understand, the More They Can Learn

Research Foundation: Reading Comprehension

Reading comprehension is the process through which readers construct meaning from text by integrating vocabulary knowledge, language comprehension, background knowledge, reasoning skills, and strategic thinking. It is widely recognized as the ultimate goal of reading instruction because successful comprehension enables students to learn, communicate, analyze information,

and engage with increasingly complex texts across academic disciplines (RAND Reading Study Group, 2002).

Unlike isolated literacy skills, reading comprehension involves the coordinated application of multiple cognitive and linguistic processes. Readers must recognize words accurately, understand vocabulary, interpret language structures, connect ideas, activate prior knowledge, monitor understanding, and draw conclusions while reading. Effective comprehension depends upon the interaction of these components rather than any single skill operating independently (Duke & Cartwright, 2021).

The RAND Reading Study Group (2002) defined reading comprehension as the process of simultaneously extracting and constructing meaning through interaction with written language. This definition emphasizes that comprehension is an active process in which readers bring their knowledge, experiences, and understanding to the text while continuously evaluating and integrating information.

Research has demonstrated that comprehension is influenced by several important factors, including vocabulary knowledge, language comprehension, reading fluency, background knowledge, and strategic thinking. Students who possess strong vocabularies and language skills are generally better able to understand text because they can access the meanings of words, phrases, and language structures encountered during reading (National Reading Panel, 2000). Similarly, fluent readers are able to devote greater cognitive resources to understanding text because less attention is required for word recognition and decoding (Rasinski, 2012).

Background knowledge also plays a significant role in comprehension. Readers use prior experiences and existing knowledge to interpret information, make connections, generate inferences, and construct meaning. When students possess relevant knowledge related to a topic, they are often better able to understand and remember what they read (RAND Reading Study Group, 2002).

Reading comprehension requires active engagement with text. Skilled readers ask questions, monitor understanding, make predictions, identify important ideas, summarize information, and evaluate evidence while reading. These strategic behaviors help readers construct meaning and deepen understanding of increasingly complex texts (Duke & Cartwright, 2021).

Because comprehension develops gradually, students benefit from repeated opportunities to engage with a variety of texts and apply comprehension skills in meaningful contexts. Ongoing practice helps students strengthen their ability to interpret information, analyze ideas, and integrate knowledge from multiple sources. Regular exposure to comprehension activities also supports the development of critical thinking and problem-solving skills that extend beyond literacy instruction.

The instructional design of *Drops in the Bucket*® reading/language arts supports reading comprehension through daily opportunities for students to engage with passages, interpret information, answer questions, apply vocabulary knowledge, and connect ideas. Reading activities require students to use previously learned literacy skills while constructing meaning from text. These opportunities encourage students to retrieve knowledge, apply comprehension strategies, and strengthen their ability to understand increasingly complex material.

Comprehension activities are embedded within a broader instructional framework that includes vocabulary development, language skills, fluency support, cumulative review, and retrieval practice. By integrating these research-supported components, the program helps students develop the literacy knowledge and strategic thinking skills that contribute to successful reading comprehension.

Through consistent engagement with text and opportunities to construct meaning, *Drops in the Bucket*® reading/language arts reflects research-supported practices associated with comprehension development and long-term reading achievement.

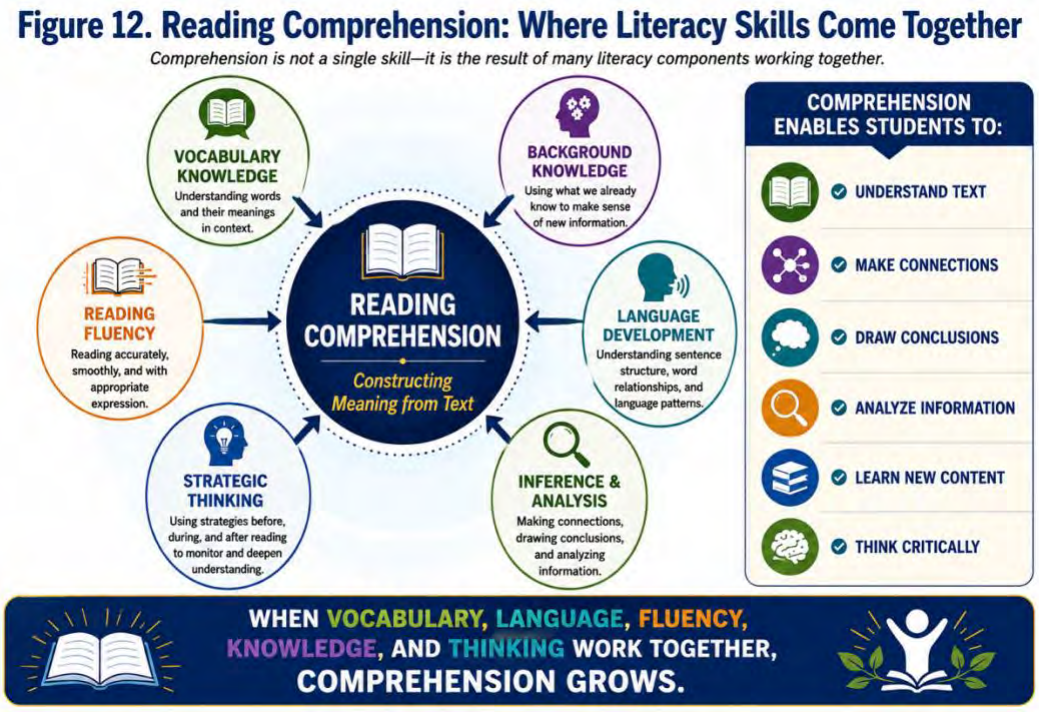


Figure 12. Reading Comprehension

Formative Assessment and Progress Monitoring

Formative assessment is an instructional process used to gather evidence of student learning during instruction for the purpose of informing teaching and improving learning outcomes. Unlike summative assessments, which evaluate learning after instruction has occurred, formative

assessments provide ongoing information that helps educators monitor progress, identify misconceptions, and make instructional adjustments while learning is taking place (Black & Wiliam, 1998).

Research has consistently demonstrated that formative assessment can have a significant positive impact on student achievement. In their landmark review of classroom assessment research, Black and Wiliam (1998) concluded that formative assessment practices contribute to improved learning outcomes across grade levels, subject areas, and student populations. When teachers regularly gather information about student understanding and use that information to guide instruction, students are more likely to experience academic success.

Effective formative assessment is not limited to formal testing. It may include observations, student responses, written work, questioning techniques, classroom discussions, performance tasks, and other instructional activities that provide insight into student understanding. These opportunities allow educators to identify learning strengths and areas requiring additional support before misunderstandings become barriers to future learning.

Within literacy instruction, formative assessment plays an important role in helping educators monitor the development of reading skills. Reading achievement depends upon the successful integration of multiple components, including vocabulary, language development, fluency, comprehension, and strategic thinking. Ongoing assessment allows teachers to determine which skills students have mastered and which skills may require additional instruction or reinforcement.

Research suggests that timely feedback is one of the most valuable aspects of formative assessment. Feedback helps students understand their current level of performance, recognize areas for improvement, and develop greater ownership of their learning. When assessment information is used to support learning rather than simply evaluate performance, students are better positioned to make meaningful academic progress (Black & Wiliam, 1998).

Formative assessment is also an important component of effective intervention systems. Within Multi-Tiered Systems of Support (MTSS), educators rely on ongoing assessment data to identify students who may require additional instruction, monitor the effectiveness of interventions, and make data-informed decisions regarding support services. Frequent assessment opportunities help ensure that instructional decisions are responsive to student needs.

The instructional design of *Drops in the Bucket*® reading/language arts incorporates formative assessment through daily literacy activities that provide ongoing evidence of student understanding. Student responses to vocabulary activities, language tasks, reading passages, and comprehension questions allow educators to observe performance and identify areas requiring additional instruction or reinforcement.

Because the program provides consistent opportunities for students to apply literacy skills, educators can use student work to monitor learning over time and make informed instructional decisions. These ongoing assessment opportunities support responsive instruction and help ensure that literacy development remains aligned with student needs.

Through regular opportunities to observe, evaluate, and respond to student learning, *Drops in the Bucket*® reading/language arts reflects research-supported formative assessment practices that contribute to improved literacy achievement and instructional effectiveness.

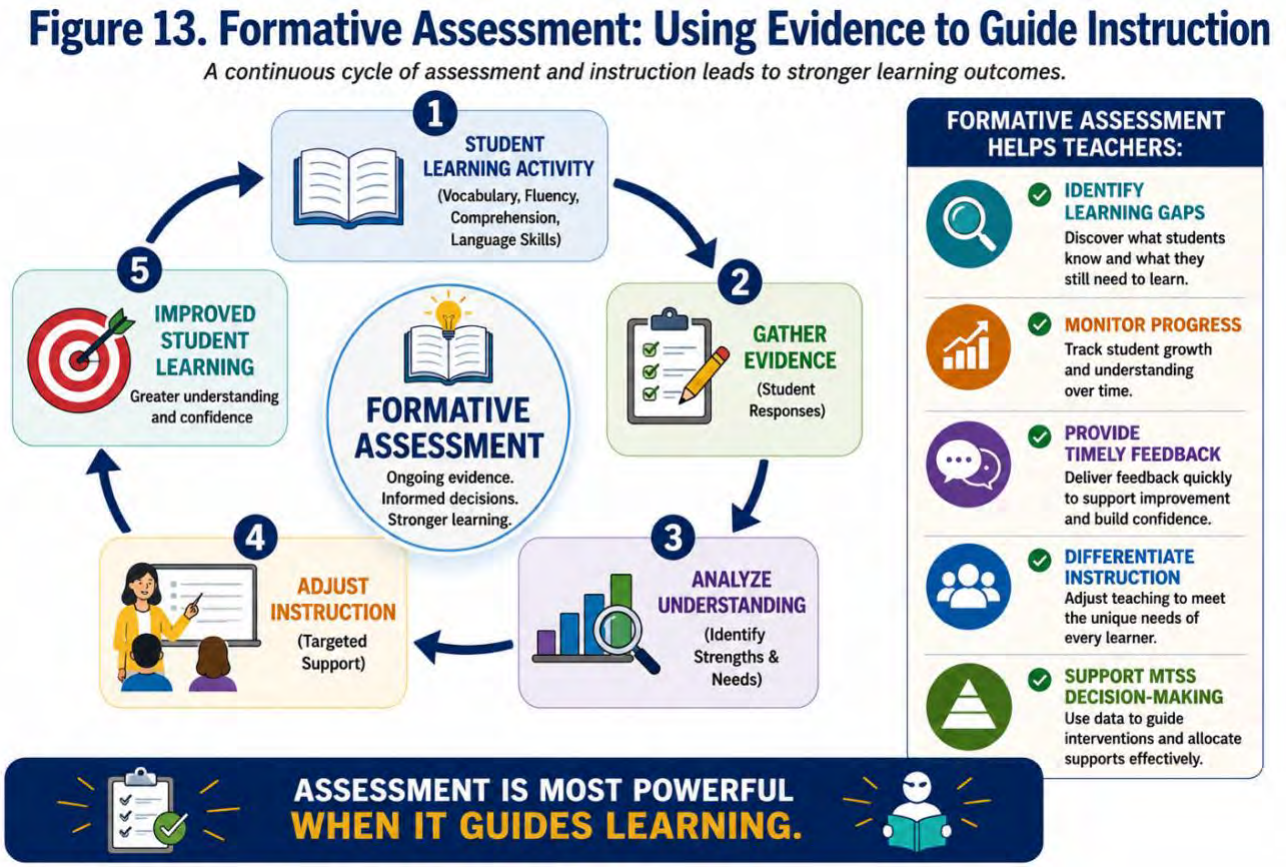


Figure 13. Formative Assessment

Multi-Tiered Systems of Support (MTSS) and Intervention Framework

Multi-Tiered Systems of Support (MTSS) is a framework designed to provide all students with access to high-quality instruction while ensuring that additional support is available for learners who require intervention. MTSS integrates assessment, instruction, progress monitoring, and data-informed decision-making within a system of increasingly intensive levels of support (Fuchs & Fuchs, 2006). The framework is intended to help educators identify student needs early, provide targeted instruction, and improve academic outcomes through responsive intervention practices.

Although implementation models vary among schools and districts, MTSS generally consists of three tiers of instructional support. Tier 1 represents high-quality core instruction provided to all students. Tier 2 provides targeted supplemental intervention for students requiring additional support. Tier 3 consists of intensive, individualized interventions designed to address significant learning needs. Movement among tiers is guided by assessment data, progress monitoring, and ongoing evaluation of student performance.

Research suggests that students benefit when interventions are provided early and adjusted based on evidence of learning. Frequent assessment and progress monitoring help educators identify learning gaps, evaluate instructional effectiveness, and make informed decisions regarding intervention services (Black & Wiliam, 1998; Fuchs & Fuchs, 2006). By providing support before difficulties become entrenched, MTSS frameworks seek to improve outcomes and reduce the number of students who experience persistent academic challenges.

Within literacy instruction, MTSS provides a structured approach for addressing diverse learning needs. Reading achievement depends upon the successful development of vocabulary, language comprehension, reading fluency, comprehension, and other literacy skills. Because students develop these skills at different rates, educators often require flexible instructional tools that can be used across multiple tiers of support.

Effective literacy interventions share several common characteristics. Research indicates that successful intervention programs provide opportunities for explicit instruction, cumulative review, repeated practice, progress monitoring, and ongoing reinforcement of essential literacy skills (Rosenshine, 2012; National Reading Panel, 2000). Interventions are most effective when they complement classroom instruction and provide students with additional opportunities to strengthen foundational knowledge and apply learning in meaningful contexts.

The instructional design of *Drops in the Bucket*® reading/language arts supports implementation within an MTSS framework by providing flexible opportunities for literacy reinforcement and intervention. The program may be used as a Tier 1 instructional support to reinforce previously taught skills and provide ongoing literacy review for all students. Daily review activities help maintain skill proficiency and provide opportunities for retrieval practice, cumulative review, and distributed learning (Dunlosky et al., 2013).

Within Tier 2 settings, the program may be used to provide targeted reinforcement for students requiring additional literacy support. The structured format allows educators to focus on specific skills while maintaining exposure to a broad range of literacy concepts. Because skills are revisited regularly, students receive multiple opportunities to strengthen learning and improve retention.

For Tier 3 intervention and specialized support settings, educators may use program levels strategically to provide additional practice aligned to individual student needs. The cumulative review structure helps reinforce previously learned skills while allowing students to continue developing literacy proficiency at an appropriate instructional level.

The program's consistent lesson structure also supports implementation in tutoring programs, after-school learning opportunities, summer learning initiatives, special education settings, and other intervention environments. Because literacy concepts are reinforced systematically over time, students receive repeated opportunities to strengthen vocabulary, language development, fluency, and comprehension skills.

Through its emphasis on daily reinforcement, cumulative review, formative assessment opportunities, and flexible implementation, *Drops in the Bucket*® reading/language arts reflects instructional practices commonly associated with effective MTSS and intervention frameworks (Black & Wiliam, 1998; Rosenshine, 2012; Dunlosky, Rawson, Marsh, Nathan, & Willingham, 2013; Fuchs & Fuchs, 2006). The program provides educators with a practical tool for supporting literacy development across varying levels of instructional intensity while promoting long-term reading achievement.

Figure 14. Supporting Every Tier of Instruction

Science of Reading Alignment

The Science of Reading is a large and evolving body of interdisciplinary research that examines how individuals learn to read and which instructional practices are associated with successful literacy development. Drawing from cognitive psychology, neuroscience, education, linguistics, and reading research, the Science of Reading has contributed substantially to educators' understanding of effective literacy instruction and the development of proficient readers (Shanahan, 2020).

Although definitions may vary, the Science of Reading generally emphasizes the importance of systematic instruction, explicit teaching, cumulative practice, language development, vocabulary acquisition, reading fluency, reading comprehension, and ongoing opportunities for application and review. Research suggests that successful reading development depends upon the interaction of multiple literacy components that work together to support reading proficiency (National Reading Panel, 2000).

The National Reading Panel (2000) identified several essential components of reading instruction, including phonemic awareness, phonics, fluency, vocabulary, and reading comprehension. These components continue to serve as foundational elements within many evidence-based literacy frameworks. Research has demonstrated that students benefit from instructional approaches that provide opportunities to develop these literacy skills while engaging with meaningful reading experiences.

Contemporary reading research also highlights the importance of language comprehension, background knowledge, vocabulary development, and strategic thinking in supporting reading

success. Duke and Cartwright (2021) note that reading comprehension emerges through the interaction of multiple literacy processes rather than a single instructional component. Similarly, Scarborough (2001) illustrated that proficient reading develops through the integration of language comprehension and word recognition processes that become increasingly interconnected over time. This perspective reinforces the understanding that successful literacy instruction must address multiple components of reading development rather than focusing on isolated skills.

The Science of Reading also emphasizes the importance of instructional practices that promote durable learning. Retrieval practice, spaced review, cumulative reinforcement, explicit instruction, and opportunities for repeated application have been associated with stronger retention and improved academic outcomes (Dunlosky et al., 2013; Rosenshine, 2012). These principles support the development of literacy knowledge that remains accessible over time and can be applied flexibly across learning situations.

The instructional design of *Drops in the Bucket*® reading/language arts reflects many of these research-supported principles. Vocabulary development, language comprehension, reading fluency, and reading comprehension are embedded throughout the instructional framework and reinforced through daily review activities. Students engage with literacy concepts repeatedly across lessons, providing opportunities to strengthen the interconnected skills identified within contemporary reading research (Scarborough, 2001; Shanahan, 2020).

The program provides structured opportunities for cumulative review, retrieval practice, vocabulary development, reading comprehension, language skill reinforcement, and ongoing application of previously learned concepts. Students regularly revisit literacy skills through daily

review activities that encourage retention, long-term learning, and increased confidence in applying literacy knowledge.

The program's emphasis on distributed practice and cumulative review aligns with research supporting the value of revisiting previously learned concepts over time. By providing ongoing opportunities for reinforcement and application, *Drops in the Bucket*® reading/language arts encourages students to strengthen literacy knowledge and maintain access to important reading skills as new learning occurs.

While *Drops in the Bucket*® reading/language arts is not intended to serve as a comprehensive core reading curriculum, its instructional framework incorporates multiple practices supported by the Science of Reading. Through daily review, cumulative reinforcement, vocabulary development, language support, reading comprehension activities, and opportunities for retrieval and application, the program reflects research-based approaches associated with literacy development and reading achievement (Scarborough, 2001; Shanahan, 2020).

Through its emphasis on reinforcement, application, and cumulative literacy development, *Drops in the Bucket*® reading/language arts supports many of the instructional principles identified within the Science of Reading and provides educators with a flexible resource for strengthening literacy skills and pr (Scarborough, 2001) promoting long-term reading success.

ESSA Alignment and Evidence-Based Practices

The Every Student Succeeds Act (ESSA) emphasizes the use of evidence-based educational practices and interventions that are informed by research and demonstrate the potential to improve student outcomes. ESSA defines four levels of evidence, ranging from strong evidence supported by well-designed experimental studies to evidence that demonstrates a research-based rationale supported by existing research and ongoing evaluation efforts (Every Student Succeeds Act, 2015).

The purpose of ESSA's evidence provisions is to encourage educators to select instructional practices and interventions that are grounded in research and aligned with established principles of effective teaching and learning. These provisions recognize that educational programs may demonstrate varying levels of evidence while still incorporating research-supported practices that contribute to student success.

The instructional framework of *Drops in the Bucket*® reading/language arts incorporates numerous practices that have been supported by literacy research, cognitive science, and educational research. These practices include retrieval practice, spaced review, interleaving, cumulative review, vocabulary development, language development, reading fluency support, reading comprehension activities, formative assessment, and structured opportunities for reinforcement and application.

Research supporting these instructional practices has been documented across multiple disciplines and educational contexts. Studies have demonstrated that retrieval practice strengthens retention, spaced review supports long-term learning, cumulative review reduces

forgetting, vocabulary development contributes to comprehension, and formative assessment supports instructional decision-making (Black & Wiliam, 1998; Dunlosky et al., 2013; National Reading Panel, 2000; Rosenshine, 2012).

ESSA recognizes that educational programs may be supported by a research-based rationale when they incorporate instructional practices grounded in existing research and are designed to improve student outcomes. The instructional design of *Drops in the Bucket*® reading/language arts reflects this research-supported approach by embedding evidence-based instructional principles throughout daily literacy activities and cumulative review experiences.

The program's design aligns with research supporting the development of literacy knowledge through repeated opportunities for retrieval, application, reinforcement, and practice. Students engage with vocabulary, language concepts, fluency-supporting activities, and reading comprehension tasks in ways that encourage retention and long-term learning. These opportunities reflect instructional practices that have been associated with improved academic outcomes and literacy achievement.

Because the program incorporates multiple research-supported instructional principles, it provides educators with a practical tool for reinforcing literacy skills within classroom, intervention, tutoring, and support settings. The integration of these evidence-based practices supports the program's role as a literacy reinforcement and intervention resource designed to strengthen reading proficiency over time.

Through its emphasis on research-supported instructional strategies, *Drops in the Bucket*® reading/language arts reflects practices consistent with ESSA's focus on evidence-based instruction and continuous improvement in student learning outcomes.

Figure 15. ESSA Evidence-based Literacy Practices

Theory of Action

The instructional framework of *Drops in the Bucket*® reading/language arts is grounded in the belief that consistent opportunities to revisit, apply, and reinforce literacy skills support long-term reading achievement. The program is designed around research-supported instructional principles, including retrieval practice, spaced review, interleaving, cumulative review, vocabulary and language development, reading fluency, reading comprehension, formative assessment, and Multi-Tiered Systems of Support (MTSS).

The theory of action underlying the program is straightforward:

If students are provided with regular opportunities to retrieve previously learned literacy knowledge, engage with a variety of reading and language tasks, revisit important concepts over time, and apply literacy skills in meaningful contexts, then they will be more likely to retain learning, strengthen reading proficiency, and successfully transfer literacy skills to new situations.

Drops in the Bucket® reading/language arts operationalizes this theory through a structured daily review format that incorporates cumulative reinforcement across multiple literacy domains. Students regularly engage with vocabulary, language conventions, reading comprehension, fluency-supporting activities, and other literacy concepts within a consistent instructional framework. Because previously taught skills continue to reappear throughout instruction, students receive repeated opportunities to strengthen retention and maintain access to essential literacy knowledge.

The program also provides educators with ongoing opportunities to observe student performance and identify instructional needs. Daily literacy activities generate evidence of student understanding that may be used to inform instruction, guide intervention efforts, and support progress-monitoring practices. This continuous cycle of instruction, practice, observation, and reinforcement aligns with research supporting effective literacy instruction and intervention.

Within classroom, intervention, tutoring, and support settings, the program's flexible design allows educators to provide additional opportunities for literacy reinforcement while maintaining alignment with broader instructional goals. Students who require additional review receive repeated exposure to important concepts, while students demonstrating proficiency continue to strengthen and apply previously learned skills.

The theory of action may be summarized as follows:

If educators provide consistent opportunities for retrieval practice, cumulative review, vocabulary development, fluency support, comprehension practice, and ongoing reinforcement, then students will strengthen literacy knowledge, improve retention, increase reading proficiency, and achieve stronger long-term literacy outcomes.

Through the integration of research-supported instructional practices, *Drops in the Bucket*® reading/language arts is designed to support literacy growth by helping students maintain, strengthen, and apply essential reading skills over time.

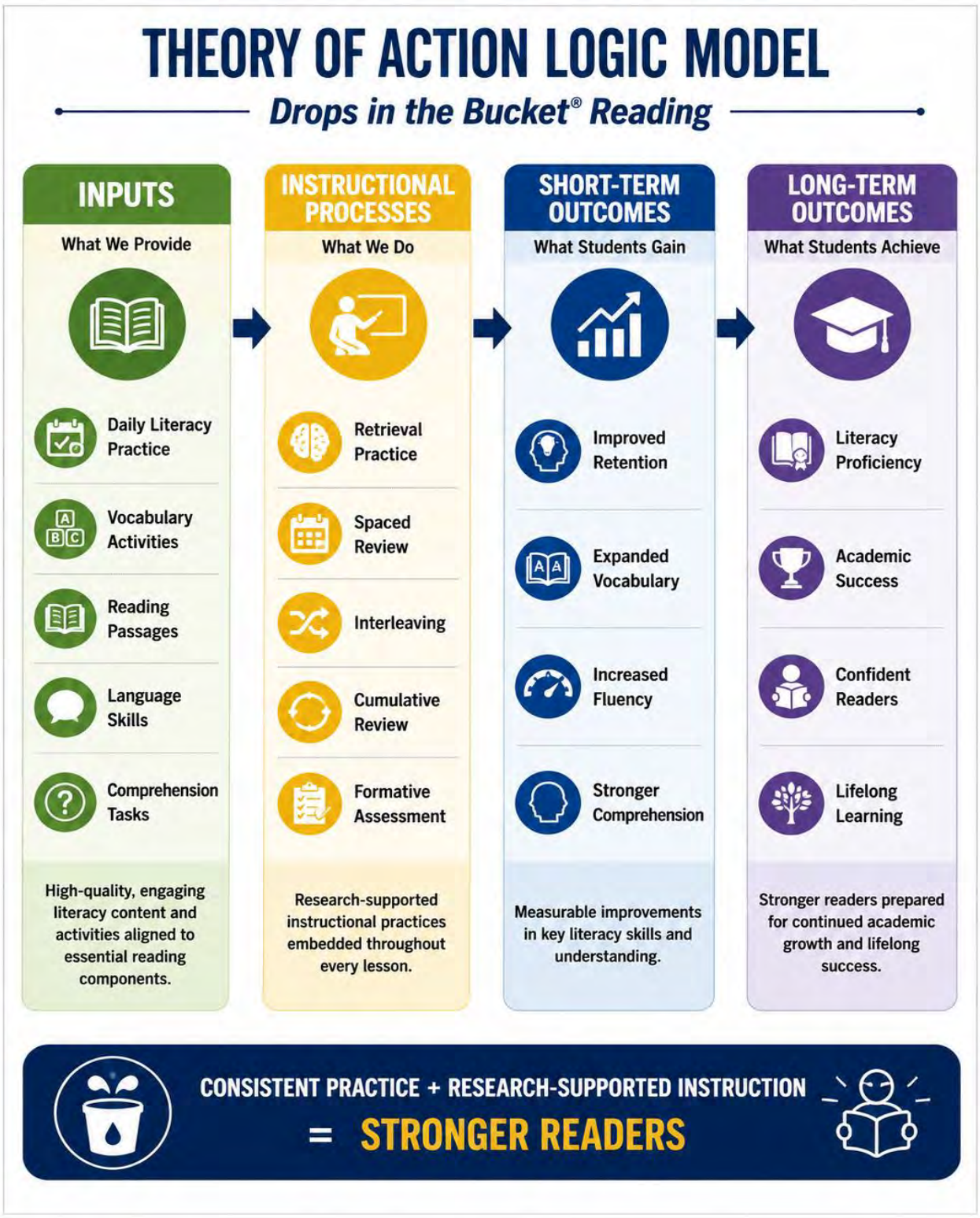


Figure 16. Theory of Action Logic Model

Appropriate Use and Implementation Considerations

Drops in the Bucket® reading/language arts is designed to provide ongoing literacy reinforcement through daily review, cumulative practice, and repeated opportunities for application of previously learned skills. The program is intended to supplement and strengthen literacy instruction by providing students with consistent opportunities to revisit important concepts and maintain access to previously acquired knowledge.

The program is most effective when used as part of a comprehensive literacy framework that includes explicit instruction, opportunities for guided practice, meaningful reading experiences, and access to high-quality texts. Because *Drops in the Bucket*® reading/language arts emphasizes reinforcement and review, it is intended to support and extend literacy learning rather than replace comprehensive reading instruction.

Implementation flexibility is one of the program's defining characteristics. Educators may use the program in a variety of instructional settings, including whole-group instruction, small-group intervention, tutoring programs, after-school programs, summer learning initiatives, and special education environments. The consistent lesson structure allows students to focus on literacy content while minimizing time spent learning new procedures and routines.

The program may be used within Multi-Tiered Systems of Support (MTSS) as a Tier 1 reinforcement resource, a Tier 2 supplemental intervention support, or a Tier 3 practice and reinforcement tool when aligned with individual student needs. Because instructional levels are organized according to skill progression rather than grade designation alone, educators may select levels that best match student readiness and instructional goals.

Successful implementation is supported when educators regularly monitor student performance and use assessment information to inform instructional decisions. Student responses provide opportunities to identify strengths, recognize areas requiring additional support, and adjust instruction as needed. These formative assessment opportunities help ensure that instruction remains responsive to student learning needs.

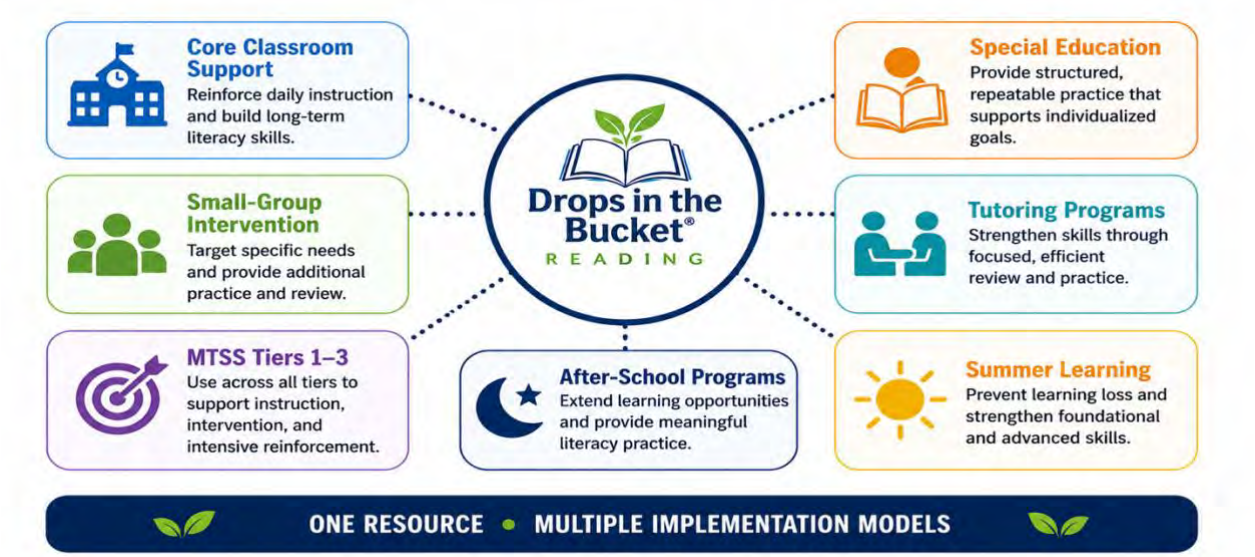


Figure 17. Educational Program Overview

Research suggests that students benefit from consistent opportunities to retrieve, apply, and reinforce previously learned information over time. Therefore, regular implementation is recommended to maximize the cumulative benefits associated with retrieval practice, spaced review, and distributed learning. Consistent use helps students maintain access to literacy knowledge and strengthen long-term retention.

As with any instructional resource, student outcomes may vary based on implementation practices, instructional context, student characteristics, and the degree to which the program is integrated within broader literacy instruction. Educators should consider local curriculum requirements, instructional priorities, and student needs when determining how the program will be used within their literacy framework. When implemented consistently and aligned with high-

quality literacy instruction, *Drops in the Bucket*® reading/language arts provides educators with a flexible, research-supported resource for reinforcing essential literacy skills and supporting long-term reading development.

Conclusion

The development of proficient readers requires more than isolated instructional experiences. Research suggests that literacy growth is strengthened when students are provided with consistent opportunities to retrieve previously learned knowledge, engage in cumulative review, revisit important concepts over time, develop vocabulary and language skills, strengthen reading fluency, and apply comprehension strategies within meaningful literacy activities. These principles have been supported across decades of research in cognitive science, reading education, and instructional practice.

The instructional framework of *Drops in the Bucket*® reading/language arts reflects many of these research-supported principles through its emphasis on daily review, distributed practice, cumulative reinforcement, vocabulary development, language support, reading comprehension, formative assessment opportunities, and flexible implementation. By providing students with repeated opportunities to engage with literacy concepts over time, the program is designed to help strengthen retention, promote skill transfer, and support long-term literacy development.

The research reviewed throughout this document highlights the importance of instructional practices such as retrieval practice, spaced learning, interleaving, cumulative review, vocabulary development, fluency support, and ongoing opportunities for application. These principles are embedded throughout the structure of *Drops in the Bucket*® reading/language arts and contribute to a learning environment that encourages students to maintain access to previously learned knowledge while continuing to develop new literacy skills.

The program is intended to serve as a flexible literacy reinforcement and intervention resource that may be implemented within a variety of instructional settings, including classroom instruction, small-group intervention, tutoring programs, summer learning initiatives, special education services, and Multi-Tiered Systems of Support (MTSS) frameworks. Its adaptable design allows educators to align implementation with local instructional goals and student needs while maintaining a focus on consistent literacy reinforcement.

Although no single instructional resource can independently address every aspect of reading development, research indicates that students benefit when effective instructional practices are implemented consistently and purposefully over time. Through its emphasis on review, reinforcement, application, and retention, *Drops in the Bucket*® reading/language arts provides educators with a practical tool for supporting literacy growth and strengthening foundational reading skills.

Ultimately, the goal of literacy instruction is not simply the acquisition of individual skills but the development of confident, capable readers who can understand, apply, and communicate knowledge effectively. By incorporating research-supported instructional principles within a structured and flexible framework, *Drops in the Bucket*® reading/language arts is designed to support educators in that important work and to contribute to improved literacy outcomes for students.

About Frog Publications

Frog Publications, Inc. has been developing educational materials for schools, educators, and families since 1975. As a woman-owned small business, Frog Publications has spent more than five decades creating practical instructional resources designed to strengthen essential academic skills through consistent practice, reinforcement, and meaningful learning opportunities. The company's materials are used in classrooms, intervention programs, tutoring settings, summer learning initiatives, and other educational environments throughout the United States.

Frog Publications specializes in Pre-K through Grade 5 instructional and intervention resources that support reading, mathematics, critical thinking, language development, family engagement, and academic reinforcement. The company's flagship *Drops in the Bucket*® programs are built upon instructional principles supported by educational research, including retrieval practice, cumulative review, spaced learning, and ongoing opportunities for skill application.

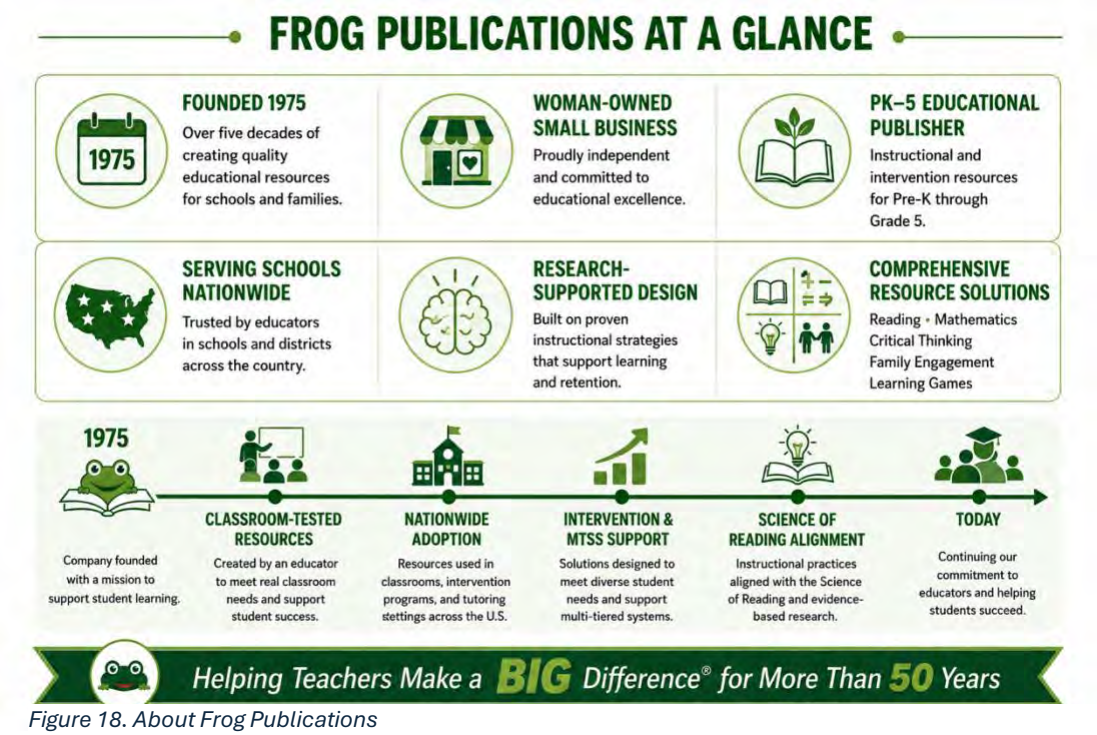


Figure 18. About Frog Publications

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