dragonfly®

Foundations Paper

The Research Foundations of *Dragonfly*®:

An Integrated Approach to Literacy Development

imagine learning

AI Disclosure Statement: Generative AI tools were used in a limited capacity to support background research, identify recent literature and assist with one visual. All manuscript text was independently written, revised, and verified by the authors.

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Executive Summary

Learning to read requires the coordinated development of multiple skills, knowledge systems, and cognitive processes. Decades of research across cognitive psychology, linguistics, neuroscience, and education demonstrate that skilled reading depends on both accurate and increasingly automatic word recognition and the language comprehension abilities needed to construct meaning from text. As students develop, these processes become increasingly integrated with background knowledge, vocabulary, fluency, reasoning, writing, discussion, self-regulation, and other dimensions of literacy development.

Dragonfly is a comprehensive K–5 literacy curriculum designed to translate this research into a coherent instructional system. Its three coordinated programs — K–5 *Knowledge Building*, K–2 *Foundational Skills*, and Grades 3–5 *Advanced Foundational Skills* — address complementary dimensions of literacy development. *Foundational Skills* develops the sound, print, decoding, encoding, and word-recognition abilities that support early reading. *Advanced Foundational Skills* extends this work through increasingly complex decoding, spelling, morphology, structural analysis, and fluency. *Knowledge Building* develops the background knowledge, vocabulary, language comprehension, reasoning, writing, and disciplinary learning students need to understand and engage with increasingly complex texts and ideas.

The research reviewed in this paper is organized around four interconnected dimensions of *Dragonfly's* instructional design. First, Developing Word Recognition Through Explicit Foundational Skills Instruction examines phonological and phonemic awareness, phonics, decoding and encoding, orthographic mapping, morphology, and fluency. Second, Building Language Comprehension Through Knowledge, Language, and Reasoning considers the role of background knowledge, vocabulary and academic language, language structures, text complexity, and verbal reasoning in comprehension. Third, Applying and Integrating Literacy Through Writing, Discussion, and Inquiry examines how students coordinate literacy processes to deepen, communicate, and apply understanding. Finally, Explicit Instruction, Differentiation, and Student Agency considers the instructional supports that help students access rigorous learning while developing increasing proficiency and independence.

Across these dimensions, several principles emerge consistently from the research. Effective literacy instruction is explicit and systematic while remaining responsive to student needs. Foundational skills and language comprehension develop in coordination rather than as competing priorities. Knowledge is built cumulatively through sustained engagement with coherent topics and high-quality texts. Reading, writing, speaking, listening, and inquiry provide mutually reinforcing opportunities to develop and apply understanding. Assessment, differentiation, multilingual learner supports, and gradual release help maintain access to rigorous grade-level learning while responding to learner variability.

Dragonfly brings these principles together through coordinated instructional routines, sequenced learning experiences, aligned texts and resources, embedded assessment and differentiation, and opportunities for students to apply literacy for increasingly sophisticated purposes. Rather than treating foundational skills, knowledge building, comprehension, writing, discussion, and student agency as separate instructional priorities, *Dragonfly* is designed to connect them within a coherent progression across the elementary grades.

This paper describes the research foundations underlying *Dragonfly's* design and illustrates how these principles are translated into instructional features, routines, and learning experiences across the curriculum. By connecting research on skilled reading with the instructional design of *Dragonfly*, the paper demonstrates how foundational skills, language comprehension, knowledge building, integrated literacy application, and responsive instruction work together within a coherent K–5 literacy system.

Introduction

Reading is one of the most important gateways to learning, opportunity, and participation in the world (Snow, Burns, & Griffith, 1998). As students progress through school, reading increasingly becomes the primary means through which they build knowledge, think critically, communicate ideas, and engage with complex information (Chall, Jacobs, & Baldwin, 1990; Hirsch, 2003; Willingham, 2006). Beyond the classroom, literacy shapes access to higher education, employment opportunities, healthcare information, and civic participation through adulthood (Hirsch, 2003).

Despite decades of educational reform, reading achievement in the United States has remained largely stagnant, with nearly two-thirds of students reading below proficiency on national assessments (National Center for Education Statistics [NCES], 2022). These challenges persist into adulthood, where national literacy data indicate that 21% of adults read below a 5th grade level (U.S., Department of Education, National Center for Education Statistics, 2019). Together, these findings have intensified attention to the importance of evidence-based literacy instruction that helps prepare the next generation not only to decode text, but also to understand, analyze, and learn from what they read.

Over the past several decades, reading research has converged around a central conclusion: skilled reading is not a single ability, but the result of multiple interacting and interconnected processes. This growing body of evidence, often referred to collectively as the science of reading, draws from cognitive psychology, neuroscience, linguistics, and education research to explain how students learn to read and why some experience persistent difficulty (Castles et al., 2018; Rayner et al., 2001). Importantly, this research challenges the assumption that reading

develops naturally through exposure alone. Instead, a substantial body of research shows that many students require explicit and systematic support in the foundational skills underlying successful reading development.

This growing body of literacy research presents an important challenge for schools and educators: how can literacy instruction intentionally develop both the mechanics of reading and the meaning-making processes that allow students to think, communicate, and learn through reading?

Research increasingly suggests that effective literacy instruction requires more than isolated skill practice or disconnected reading experiences. Students must learn to recognize words accurately and automatically while simultaneously building the vocabulary, background knowledge, language structures, and reasoning abilities necessary for comprehension (Duke & Cartwright, 2021; Ehri, 2014; Moats, 2020; Scarborough, 2001; Willingham, 2006, 2017). Effective instruction therefore requires coherent systems of learning that:

- Develop foundational reading skills explicitly and systematically;
- Intentionally build knowledge and vocabulary;
- Integrate reading, writing, speaking, and listening;
- Support productive discussion and inquiry; and
- Provide engaging opportunities to apply learning across texts and contexts.

Grounded in these principles, *Dragonfly* was designed as a comprehensive K–5 literacy curriculum built on the science of reading. The curriculum integrates explicit and systematic foundational skills instruction with knowledge-rich literacy experiences built around authentic, high-quality texts rather than basal readers, anthologies, or disconnected excerpts. By organizing instruction around coherent topics explored through real books over time, *Dragonfly* is designed to support the systematic development of students' background knowledge alongside comprehension, vocabulary, writing, speaking, listening, and critical thinking.

The purpose of this paper is to describe the research base underlying *Dragonfly* and to explain how its design reflects contemporary understanding of skilled reading development. Specifically, this paper examines how *Dragonfly* operationalizes research on word recognition, language comprehension, knowledge building, discussion, writing, and differentiated support across Grades K–5. By connecting these research foundations to program features and instructional routines, the paper illustrates how *Dragonfly* is intended to support both "learning to read" and "reading to learn" through coherent, cumulative and structured literacy across the elementary grades.



Understanding Skilled Reading

Several influential frameworks have shaped current understanding of skilled reading by emphasizing the relationship among word recognition, language comprehension, knowledge building, fluency, and broader cognitive processes. Although these models differ in emphasis, they collectively reinforce a common conclusion: effective literacy instruction should develop accurate word recognition while simultaneously fostering language comprehension and systematically building students' background knowledge through coherent, increasingly complex learning experiences.

The Simple View of Reading

One of the most influential frameworks in reading research is the Simple View of Reading, which proposes that reading comprehension depends on two broad, interconnected capacities: word recognition and language comprehension (Gough & Tunmer, 1986; Hoover & Gough, 1990). Rather than viewing reading as a single ability, the Simple View suggests that successful comprehension depends on students developing strength in both domains. Students may struggle with reading for different reasons: some have trouble recognizing words accurately and fluently, while others can decode text successfully but struggle to understand meaning.

The Simple View is particularly useful because it distinguishes between these two broad sources of reading difficulty without reducing reading to a single skill. However, it does not specify all of the component skills and knowledge that contribute to either word recognition or language comprehension.

Scarborough's Reading Rope

Scarborough's Reading Rope expanded the Simple View of Reading by illustrating the many underlying processes that contribute to word recognition and language comprehension (Scarborough, 2001). While the Simple View conceptualizes reading comprehension broadly as the product of these two domains, the Reading Rope provides a more detailed developmental model of the specific skills and processes within each.

Scarborough organized these processes into separate "strands" that gradually become woven together as reading develops. These strands are grouped within the two broad domains identified in the Simple View of Reading: word recognition and language comprehension. Within each domain, the Reading Rope specifies the component skills and knowledge that become increasingly coordinated over time. As these strands strengthen and integrate, they form a cohesive system that supports skilled reading — the reading rope.

Word recognition refers to the ability to accurately and efficiently identify written words through skills such as phonological awareness, phonics, decoding, and automatic word recognition. A large body of research shows that students who struggle to recognize words

accurately and fluently often devote so much cognitive effort to decoding that fewer mental resources remain available for comprehension (Duke & Cartwright, 2021; Ehri, 2014; National Reading Panel, 2000; Scarborough, 2001). Effective instruction, therefore, requires explicit and systematic support in the foundational skills that help students connect speech sounds to print and develop increasingly automatic word recognition (Moats, 2020).

Language comprehension refers to the ability to understand spoken language, including vocabulary, background knowledge, syntax, verbal reasoning, and broader language structures. Students can sometimes decode text accurately but still struggle to understand what they read because they lack the vocabulary, knowledge, or language comprehension abilities necessary to construct meaning from increasingly complex texts (Duke & Cartwright, 2021; Hirsch, 2003; Snow, 2002; Willingham, 2006). To develop strong comprehension skills, students need opportunities to build conceptual knowledge, academic language, reasoning, and comprehension skills through rich, integrated literacy experiences.

The Reading Rope framework is especially important because it highlights that skilled reading depends on the integration of multiple interacting abilities rather than any single instructional component alone. Research across cognitive psychology, linguistics, and reading development consistently supports the idea that students require both strong word-recognition skills and strong language-comprehension abilities to comprehend increasingly complex texts successfully (Castles et al., 2018; Snow, 2002).

The Reading Rope also reinforces the importance of comprehensive literacy instruction that supports multiple dimensions of reading development simultaneously. Students benefit from explicit and systematic foundational skills instruction while also building vocabulary, knowledge, language structures, reasoning abilities, and opportunities for rich reading, writing, discussion, and inquiry. Over time, these strands become increasingly integrated, supporting more fluent, strategic, and independent comprehension.

Active View of Reading

More recent frameworks, including the Active View of Reading, further expand these earlier models by emphasizing that reading depends not only on word recognition and language comprehension, but also on broader cognitive, motivational, and self-regulatory processes that help coordinate skilled reading (Duke & Cartwright, 2021). While the Simple View of Reading and Scarborough's Reading Rope focus primarily on the interaction between word recognition and language comprehension, the Active View highlights the importance of the processes that help readers actively manage, integrate, and apply these skills during reading.

The Active View of Reading introduces the idea that several "bridging processes" support the connection between word recognition and comprehension. These processes include reading fluency, morphological awareness, executive functioning, strategic thinking, motivation, attention, and self-regulation. Reading fluency, for example, helps readers devote

less cognitive effort to decoding individual words so that more attention can be directed toward comprehension and meaning making (Rasinski, 2012). Morphological awareness helps students recognize meaningful word parts, supporting both accurate word recognition and understanding of increasingly complex academic vocabulary (Carlisle, 2010). Executive functioning and self-regulation also contribute to successful reading because students must sustain attention, monitor understanding, apply strategies flexibly, and coordinate multiple literacy processes simultaneously during reading (Cartwright, 2012).

This framework is important because it reinforces the idea that skilled reading involves more than accurate decoding and language knowledge alone. Students must also learn to apply literacy skills strategically and purposefully across varied contexts. Supporting these processes requires literacy instruction that integrates foundational skills with rich opportunities for language comprehension, discussion, writing, inquiry, motivation, and authentic application.

Implications for Evidence-Based Literacy Instruction

Together, these models reinforce a common understanding: reading development is multidimensional, cumulative, and deeply interconnected. Literacy instruction must do more than expose students to texts or provide isolated skill practice. Students require explicit and systematic instruction in foundational reading skills such as phonemic awareness, phonics,

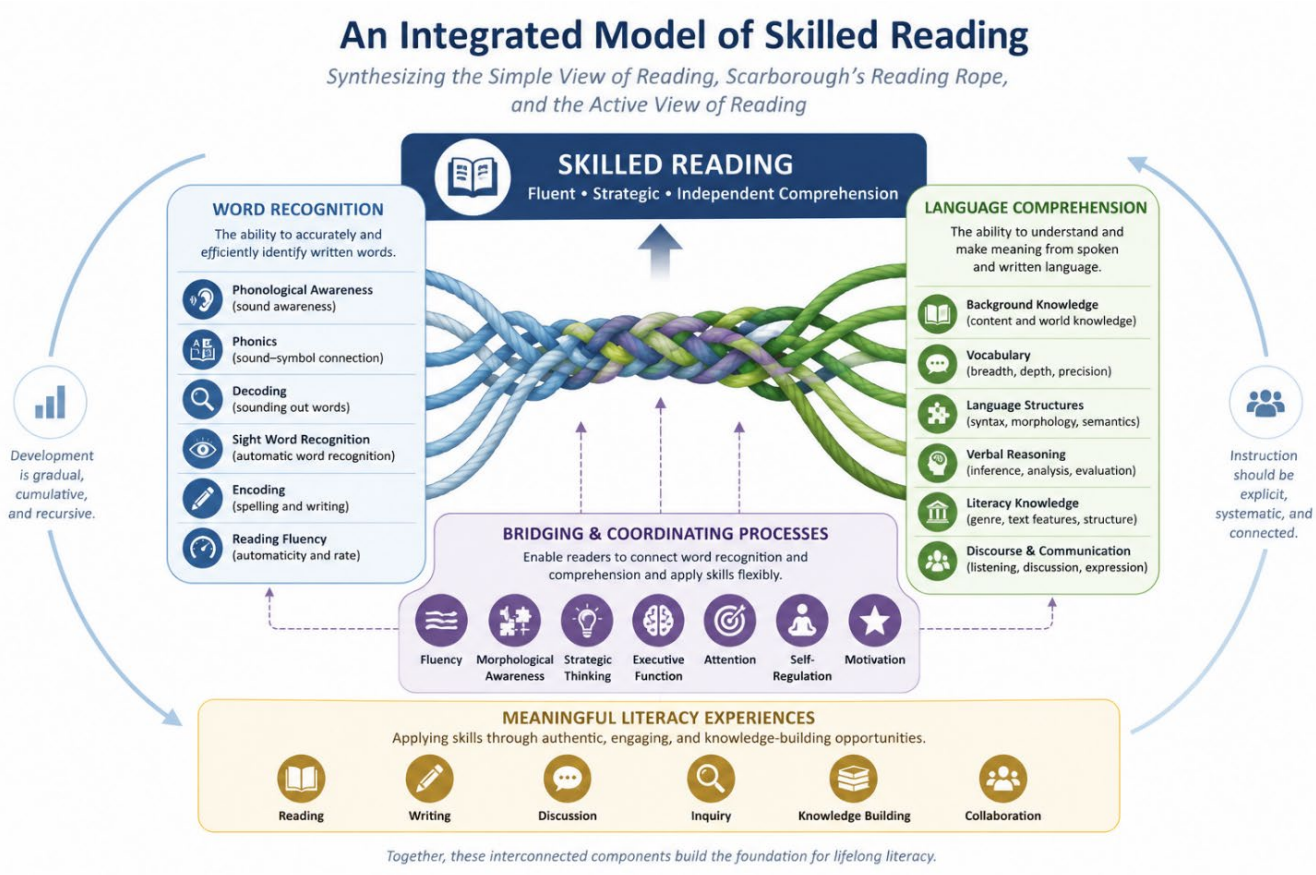


Figure 1. *Integrated Model of Skilled Reading*

decoding, encoding, and fluency, while also developing the language, vocabulary, knowledge, and reasoning abilities necessary for comprehension. Just as importantly, students need relevant opportunities to apply these skills through reading, writing, discussion, inquiry, and knowledge-building experiences that help literacy skills become integrated and transferable over time (see Figure 1).

Dragonfly was designed in response to this converging body of research, with a commitment to providing standards-aligned, grade-level content every day for every student. The curriculum operationalizes these principles through coordinated instruction that integrates explicit foundational skills development, knowledge-rich language comprehension instruction, authentic reading and writing experiences, collaborative discussions, inquiry, and opportunities to apply literacy learning across Grades K–5.

Dragonfly: A Research-Informed Literacy System

Dragonfly was designed around a central principle reflected across contemporary reading research: skilled reading develops when students receive coherent instruction that intentionally integrates word recognition, language comprehension, knowledge building, and opportunities to apply literacy skills over time.

Rather than treating literacy as a collection of isolated skills, *Dragonfly* approaches reading development as a coordinated process in which foundational skills and meaning-making develop together. Decoding and fluency support increasingly automatic word recognition, while vocabulary, comprehension, discussion, writing, and knowledge building support students' ability to understand, analyze, and learn from text.

This integrated model reflects research showing that students must both "learn to read" and "read to learn." In the early stages of reading development, students require explicit and systematic instruction in foundational skills such as phonemic awareness, phonics, decoding, encoding, and fluency so they can accurately and automatically recognize words. At the same time, students must also build background knowledge, vocabulary, language structures, and reasoning abilities that allow them to understand and learn from text. *Dragonfly* was designed to support both dimensions simultaneously, recognizing that word recognition and comprehension develop together and reinforce one another across the elementary grades.

To support this development, *Dragonfly* is organized into three coordinated instructional programs: K–5 *Knowledge Building*, K–2 *Foundational Skills*, and Grades 3–5 *Advanced Foundational Skills*. Together, these programs create a coherent instructional pathway that moves students from early sound and print awareness toward fluent comprehension and independent engagement with increasingly complex texts.

Grades K–5 *Knowledge Building*

Knowledge Building develops background knowledge, comprehension, vocabulary, writing, speaking, and listening through coherent topics, authentic texts, discussion, and meaningful performance tasks. Students build knowledge across sequenced modules that immerse them in science, social studies, literature, and other disciplinary content while engaging in reading, writing, discussion, and research connected to rich and purposeful questions.

Grades K–2 *Foundational Skills*

Foundational Skills provides explicit and systematic instruction in phonemic awareness, phonics, decoding, encoding, high-frequency word recognition, fluency, and early morphology. Grounded in research on how children learn the alphabetic code, instruction follows a carefully sequenced progression that helps students develop accurate and increasingly automatic word recognition.

Decodable texts, writing activities, and cumulative practice are aligned to the program's scope and sequence so that students can apply newly introduced skills in connected reading while continuing to reinforce previously learned patterns. Whole-group lessons, data-informed small-group instruction, independent rotations, and instructional materials provide multiple opportunities for students to apply and strengthen foundational skills across contexts.

Grades 3–5 *Advanced Foundational Skills*

Advanced Foundational Skills extends foundational skills instruction into the upper elementary grades as students move from basic decoding toward fluent and flexible reading. Instruction focuses on advanced decoding, encoding, morphology, fluency, word study, and connected text practice to support students in reading multisyllabic words, academic vocabulary, and sophisticated language structures.

Through coordinated whole-group routines and small-group instruction, independent practice, and texts connected to *Knowledge Building* module topics, students continue developing the automaticity and language awareness needed for comprehension and academic reading.

A defining feature of *Dragonfly's* instructional model is the intentional coordination among these programs. Students do not practice foundational skills only in isolation, nor do they encounter comprehension instruction disconnected from reading development. Instead, *Dragonfly* creates a coherent knowledge-building arc in which students apply decoding, fluency, vocabulary, morphology, and comprehension strategies across authentic and complex texts.

Dragonfly also extends this instructional coherence through an intentionally connected print-and-digital ecosystem. Teacher Guides, Student Companions, decodable books, connected texts, digital lessons, media, assessments, and reporting tools are aligned lesson by lesson to support teacher-led instruction. Teachers use the platform to prepare and facilitate lessons, assign work, provide feedback, monitor progress, and make instructional decisions informed

by student performance data. Students engage with print instructional materials throughout daily instruction and reinforce learning in print Student Companions, which provide printed group and independent practice activities, curriculum texts, and progress trackers, and use digital resources to extend learning, complete assignments, review feedback, track progress, and revisit concepts as needed.

Across all three programs, *Dragonfly* emphasizes coherent and cumulative instruction in which skills and knowledge are revisited, reinforced, and applied over time. Lessons use consistent instructional routines, explicit modeling, guided practice, collaborative discussion, real-world application, and reflection to help students build confidence and independence as readers, writers, speakers, and thinkers.

Research-Aligned Dimensions of *Dragonfly* Instruction

The research frameworks described above centralize on a key principle: skilled reading develops through the coordinated growth of multiple, interconnected processes. Students need explicit and systematic instruction in foundational word-recognition skills while simultaneously developing the language, knowledge, reasoning, and self-regulatory processes necessary for comprehension and literacy applications.

Dragonfly translates these principles into coordinated instructional experiences across grades K–5. Its three interconnected programs — *Foundational Skills*, *Advanced Foundational Skills*, and *Knowledge Building* — are designed to help students develop accurate and automatic word recognition, build deep knowledge and academic language, reason with and about texts, and apply literacy skills through reading, writing, discussion, and inquiry.

The following sections highlight major dimensions of reading development and discuss how *Dragonfly* operationalizes the research through specific instructional routines, resources, lesson structures, and application opportunities. Rather than treating foundational skills, knowledge building, comprehension, writing, and student agency as separate instructional priorities, *Dragonfly* integrates them within a coherent literacy system designed to support increasingly independent reading, thinking, and communication (see Table 1).



Table 1. *Dragonfly's Integrated Dimensions of Literacy Development*

Major Dimension	Components Discussed	Why They Matter	*Dragonfly* Implementation
Developing Word Recognition Through Explicit *Foundational Skills* Instruction	Phonological and phonemic awareness; phonics, decoding, and encoding; high-frequency words and orthographic mapping; fluency; responsive assessment	These processes support accurate, efficient, and increasingly automatic recognition of printed words, allowing students to devote greater attention to meaning and comprehension.	*Foundational Skills* and *Advanced Foundational Skills* provide explicit, systematic, and cumulative instruction; aligned decodable and connected texts; Skills Checks; benchmark assessments; and responsive instructional supports.
Building Language Comprehension Through Knowledge-Rich Literacy Instruction	Background knowledge; vocabulary and academic language; language structures and text complexity; verbal reasoning and discussion	These dimensions help students interpret language, connect ideas, make inferences, reason with evidence, and comprehend increasingly complex literary and informational texts.	*Knowledge Building* organizes instruction around coherent topics and integrates content-rich texts, explicit vocabulary instruction, sentence-level language work, close reading, discussion, writing, and inquiry.
Integrated Literacy Development Through Reading, Writing, Discussion, and Inquiry	Writing as a tool for thinking and comprehension; collaborative discussion and academic discourse; authentic application and Performance Tasks	Literacy processes reinforce one another. Students deepen knowledge and comprehension when they read, write, discuss, analyze words, investigate questions, and communicate learning for purposeful audiences.	Students write about texts, participate in structured academic discussions, conduct research, and synthesize learning through authentic Performance Tasks.
Explicit Instruction, Differentiation, and Student Agency	Explicit instruction and gradual release; responsive instruction and assessment; differentiation and responsive support; multilingual learner supports; student ownership and self-regulation	Clear modeling, responsive scaffolding, accessible language supports, feedback, and reflection help students develop proficiency while participating in rigorous grade-level literacy instruction.	*Dragonfly* uses consistent lesson structures, teacher modeling, guided and independent practice, Point-of-Use Differentiation, flexible groups, multimodal and language supports, Learning Targets, reflection routines, and Habits of Character.

Dimension 1: Developing Word Recognition Through Explicit *Foundational Skills* Instruction

Accurate and automatic word recognition is essential to skilled reading because students must efficiently identify printed words before they can devote substantial cognitive attention to comprehension and meaning-making (Ehri, 2014; National Reading Panel, 2000; Scarborough, 2001). Research indicates that word recognition develops through coordinated instruction in phonological awareness, phonemic awareness, phonics, decoding, encoding, orthographic mapping, high-frequency word recognition, and fluency (Moats, 2020). The sections that follow examine how these interconnected processes are integrated into the *Dragonfly* curriculum to support the development of increasingly accurate, automatic, and fluent reading.

Dragonfly develops word recognition through the coordinated design of its *Foundational Skills* and *Advanced Foundational Skills* programs. Across Grades K–5, students progress through explicit and systematic instruction in speech sounds, sound-spelling relationships, decoding, encoding, high-frequency words, multisyllabic word reading, morphology, and fluency. Carefully sequenced lessons provide repeated opportunities to learn, practice, and apply these skills in words, sentences, decodable books, connected texts, and writing. Across both programs, explicit and systematic instruction is paired with cumulative application in reading and writing so that foundational skills become increasingly accurate, automatic, and transferable across contexts.

Phonological and Phonemic Awareness

Phonological awareness is the understanding that spoken language is composed of smaller sound units, including words, syllables, onsets, rimes, and phonemes (Anthony & Francis, 2005; Wagner & Torgesen, 1987). Students develop phonological awareness as they learn to recognize and manipulate these sound structures through activities such as rhyming, syllable segmentation, onset-rime blending, and oral language play. These experiences help students become increasingly attentive to the sound structures within spoken words and prepare them for more precise phoneme-level analysis (Adams, 1990; Castles et al., 2018; Goswami, 2001).

Phonemic awareness is a more specialized subset of phonological awareness involving the ability to hear, identify, segment, blend, and manipulate individual speech sounds (phonemes) within spoken words (Liberman et al., 1974; Stanovich, 1993). Because alphabetic reading requires students to connect individual speech sounds to letters and spelling patterns, phonemic awareness is a strong predictor of later word recognition, spelling, and reading achievement (Bradley & Bryant, 1983; Wagner, Torgesen, & Rashotte, 1994).

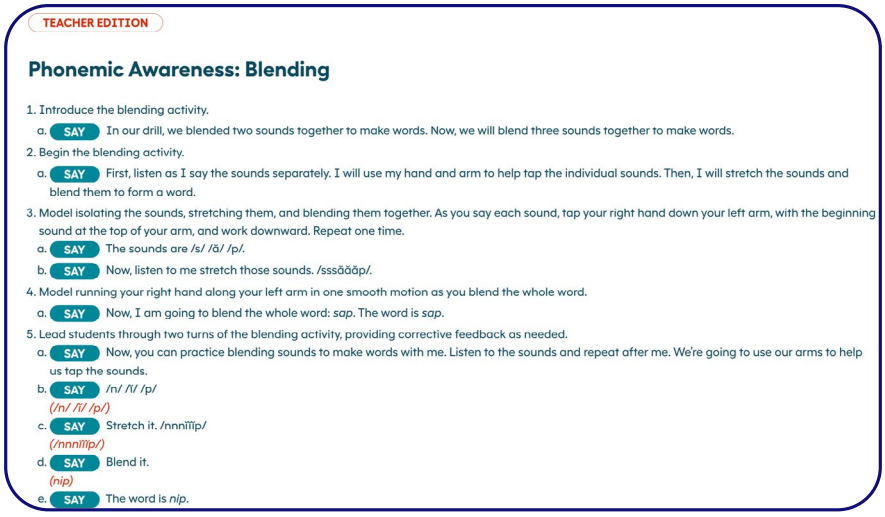
Together, phonological and phonemic awareness prepare students to connect the sound structures of spoken language to print during reading and writing (Ehri, 2014; Moats, 2020; National Reading Panel, 2000).

Dragonfly in Practice: Phonological and Phonemic Awareness

Within *Dragonfly's* K–2 *Foundational Skills* program, instruction progresses from broader phonological awareness of spoken-language structures to increasingly complex phoneme-level tasks. Students engage in fast-paced oral practice of phonemic awareness skills through explicit teacher modeling and guided practice. Instruction also includes articulation support and direct teaching of sound-spelling correspondences, helping students connect individual speech sounds to the letters that represent them.

Dragonfly connects sound work directly to phonics, decoding, and encoding instruction. Students apply newly developed awareness of speech sounds as they learn to associate phonemes with letters and spelling patterns, strengthening the connection between spoken and written language.

Figure 2 illustrates this progression through a blending activity in which Kindergarten students combine individual phonemes to form spoken words. The routine gives students focused practice with a core phonemic awareness skill that supports later decoding and spelling.



TEACHER EDITION

Phonemic Awareness: Blending

1. Introduce the blending activity.
   a. SAY In our drill, we blended two sounds together to make words. Now, we will blend three sounds together to make words.
2. Begin the blending activity.
   a. SAY First, listen as I say the sounds separately. I will use my hand and arm to help tap the individual sounds. Then, I will stretch the sounds and blend them to form a word.
3. Model isolating the sounds, stretching them, and blending them together. As you say each sound, tap your right hand down your left arm, with the beginning sound at the top of your arm, and work downward. Repeat one time.
   a. SAY The sounds are /s/ /ă/ /p/.
   b. SAY Now, listen to me stretch those sounds. /sssăăăp/.
4. Model running your right hand along your left arm in one smooth motion as you blend the whole word.
   a. SAY Now, I am going to blend the whole word: *sap*. The word is *sap*.
5. Lead students through two turns of the blending activity, providing corrective feedback as needed.
   a. SAY Now, you can practice blending sounds to make words with me. Listen to the sounds and repeat after me. We're going to use our arms to help us tap the sounds.
   b. SAY /n/ /ĭ/ /p/
   (/n/ /ĭ/ /p/)
   c. SAY Stretch it. /nnnĭĭĭp/
   (/nnnĭĭĭp/)
   d. SAY Blend it.
   (nip)
   e. SAY The word is *nip*.

Figure 2. *Sample Phonemic Awareness: Blending activity focuses on phonemic awareness skills from Foundational Skills Grade K, Module 2, Cycle 7, Lesson 2.*

Explicit phonemic awareness instruction strengthens students' ability to analyze the internal sound structures of words and supports subsequent decoding, spelling, and word-recognition development (Melby-Lervag, Lyster, & Hulme, 2012). Its impact is particularly strong when sound manipulation is connected to letters and print rather than taught only as an isolated oral-language exercise (Byrne & Fielding-Barnsley, 1991; Torgesen, 2002).

By coordinating oral sound work with phonics, decoding, and encoding, *Dragonfly* helps students connect the sound structures of spoken language to written language.

Phonics, Decoding, and Encoding

Learning to read alphabetic languages requires students to understand the systematic relationship between spoken sounds and written symbols. Phonics instruction supports this development by helping students connect phonemes to letters and spelling patterns so that they can decode unfamiliar words during reading and encode words during writing (Ehri, 2014; Moats, 2020; National Reading Panel, 2000). Mastery of these sound-spelling relationships is central to the development of the alphabetic principle and increasing automatic word recognition.

Dragonfly in Practice: Best Wishes on Your Trip

Dragonfly provides explicit and systematic phonics instruction across K–2 *Foundational Skills* and Grades 3–5 *Advanced Foundational Skills*. Its scope and sequence progresses from foundational sound-spelling correspondences to multisyllabic word reading, complex syllable patterns, advanced spelling generalizations, morphology, and structural analysis.

Students do not encounter these concepts only in isolated word lists. Newly introduced sound-spelling patterns are immediately applied through word-level decoding and encoding practice and reinforced through connected reading and writing. In *Foundational Skills*, students read *Lift Off* decodable books aligned to the phonics scope and sequence. In *Advanced Foundational Skills*, students revisit target patterns through explicit phonics instruction, encoding routines, morphology, fluency work, and connected texts. Together, these experiences provide repeated opportunities to apply newly taught sound-spelling patterns while reinforcing previously learned skills.

Figure 3 illustrates this connection in practice through the decodable book *Best Wishes on Your Trip*, used in Grade 1, Module 2, Cycle 9. During this cycle, students learn the suffixes *-s* pronounced */s/* (e.g., claps), *-s* pronounced */z/* (e.g., bugs), and *-es* pronounced */ĭz/* (e.g., fizzes). As students read *Best Wishes on Your Trip*, they encounter words that reflect these newly taught patterns, including *hands, rips, cuts, sticks,* and *gushes*, while also revisiting previously taught phonics patterns and high-frequency words from earlier Grade 1 cycles and Kindergarten.



Figure 3. *Pages 5 and 6 from the decodable book Best Wishes on Your Trip.*

For example, the text incorporates previously learned words such as *Dad, Van, pad, this, fix, it, yes, Tim, on*, and *red* from Kindergarten phonics instruction; the Kindergarten high-frequency words *a*, *and*, and *is*; the Grade 1 high-frequency words *yellow* and *would*; and previously

taught decodable words such as *wow, now, brown*, and *pink*. This intentional combination of new learning and cumulative review gives students opportunities to strengthen decoding accuracy and automaticity while applying their developing word-reading skills in connected, meaning-focused text.

Foundational Skills Decodable Books

In *Foundational Skills* Kindergarten, a New Concept lesson introduces consonant blends containing the letter *l* (see Figure 4). The lesson explicitly models the target sound-spelling pattern and provides supported opportunities for students to read and build words.

Later in the same cycle, a Decoding: Reading with Comprehension routine asks students to apply the newly learned pattern while reading a decodable book featuring consonant blends with *l* (see Figure 5). The sequence illustrates how *Dragonfly* moves from explicit instruction to authentic application within connected text.

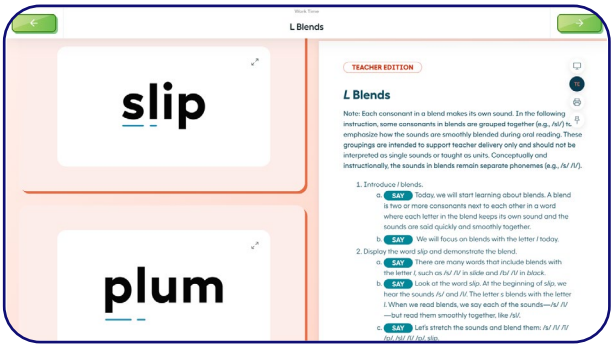


Figure 4. *A New Concept lesson introduces consonant blends with the letter l from Foundational Skills Grade K, Module 4, Cycle 21, Lesson 1.*

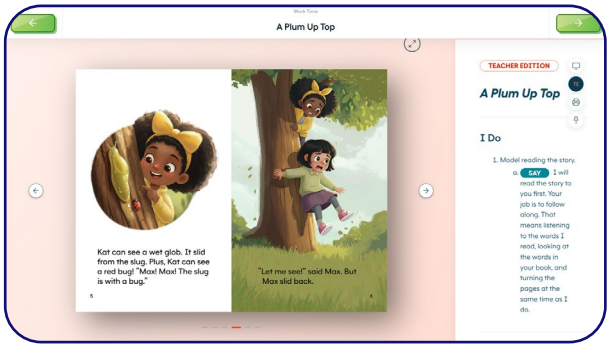


Figure 5. *A Decoding: Reading with Comprehension lesson allows students to apply their decoding skills by reading a decodable book featuring consonant blends with the letter l from Foundational Skills Grade K, Module 4, Cycle 21, Lesson 3.*

Advanced Foundational Skills Phonics Instruction

In *Advanced Foundational Skills*, Lesson 1 of each introduction cycle establishes new phonics concepts through an explicit and cumulative instructional routine. Teachers define and model the target feature, demonstrate a consistent coding process, guide students through supported practice, and then provide opportunities for partner and independent application.

For example, Introduce a New Concept in *Advanced Foundational Skills* Grade 3, Module 1, Cycle 7, Lesson 1 introduces open and closed multisyllabic words containing '*schwa*.' The lesson makes the underlying structure visible before students revisit the pattern through encoding, fluency, morphology, and connected reading throughout the cycle (see Figure 6).

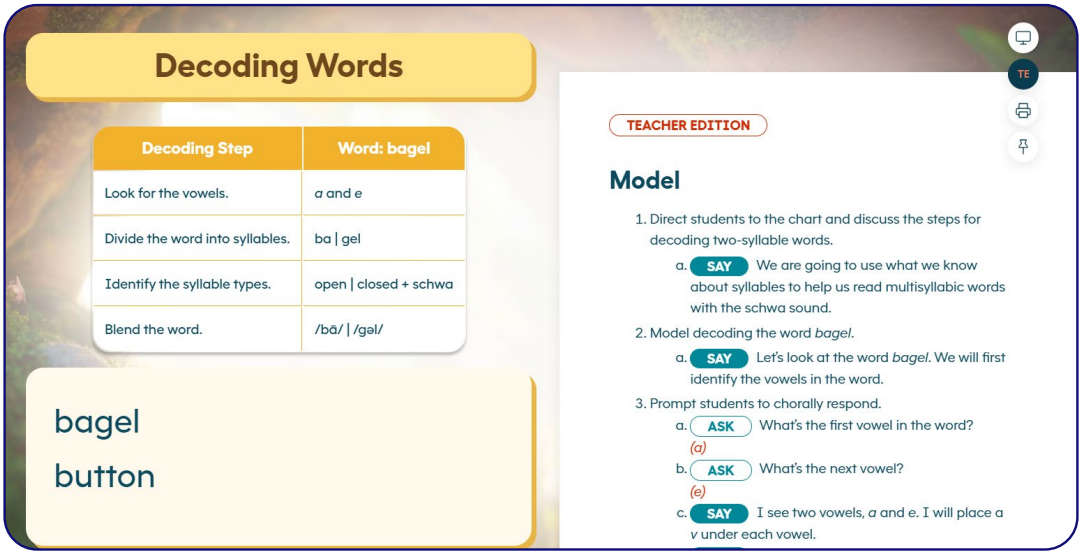


Figure 6. *Lesson 1 titled Introduce a New Concept introduces open and closed multisyllabic words with 'schwa' from Advanced Foundational Skills Grade 3, Module 1, Cycle 7, Lesson 1.*

This instructional progression reflects evidence that phonics instruction is most effective when it is explicit, systematic, cumulative, and connected to authentic reading and writing experiences (Foorman et al., 2016; National Reading Panel, 2000). Explicit instruction helps make sound-spelling relationships visible through direct modeling and guided practice, while systematic instruction ensures that new patterns build purposefully on previously developed knowledge.

Decoding and encoding reinforce one another throughout this process (Ehri, 2014; Moats, 2020). Students decode by translating print into spoken language and encode by applying sound-spelling knowledge during writing. Both processes require careful analysis of phonemes, graphemes, and spelling patterns, strengthening the mental connections necessary for orthographic mapping and increasingly automatic word recognition (Perfetti, 1992; Share, 1995).

Integrating decoding and encoding also supports stronger spelling development and long-term retention of orthographic patterns (Ouellette & Sénéchal, 2017). As students become more proficient readers, they extend these foundational skills to increasingly complex words, multisyllabic decoding, advanced spelling patterns, and morphological analysis, allowing them to approach more sophisticated texts with accuracy and confidence.

By coordinating explicit instruction, reciprocal decoding and encoding practice, and application in connected text, *Dragonfly* helps students develop the increasingly flexible and automatic word-recognition skills needed to engage with more complex reading.

High-Frequency Words and Orthographic Mapping

Fluent reading depends on both the ability to decode unfamiliar words and the rapid recognition of familiar ones. As written words become securely stored in long-term memory, readers can retrieve them efficiently and devote greater attention to comprehension and meaning-making (Ehri, 2005, 2014; Perfetti, 1992).

Orthographic mapping is the process through which readers form lasting connections among a word's phonemes, graphemes, pronunciation, and meaning, allowing the word to become increasingly automatic during reading (Ehri, 2014). Students benefit when instruction helps them analyze the regular and irregular features within words rather than relying exclusively on rote memorization (Ehri, 2014; Share, 1995). Attention to sound-spelling relationships, pronunciation, and meaning helps strengthen orthographic representations and supports long-term word retention.

Dragonfly supports this development through explicit instruction in high-frequency analysis of sound-spelling relationships, and cumulative opportunities to read, spell, and write words across connected literacy experiences. This approach is consistent with Heart Word instruction, in which students analyze the sounds and spellings within high-frequency words and identify portions that do not yet conform to familiar phonics patterns rather than memorizing words as unanalyzed visual wholes (Farrell, Hunter, & Osenga, n.d.; Lithgow et al., 2026).

The rationale for this approach is grounded in research on orthographic mapping. Connections among phonemes, graphemes, pronunciation, and meaning allow written words to become securely represented in memory and increasingly automatic during reading (Ehri, 2014, 2020). Directing students' attention to both regular and irregular sound-spelling correspondences therefore reinforces their understanding of the alphabetic system while supporting the development of automatic word recognition.

Dragonfly in Practice: High-Frequency Words Analysis

In *Foundational Skills* Kindergarten, a High-Frequency Words: Analysis routine introduces the word *was*. Students examine its regular and irregular sound-spelling features rather than memorizing the word only as a visual shape (see Figure 7).

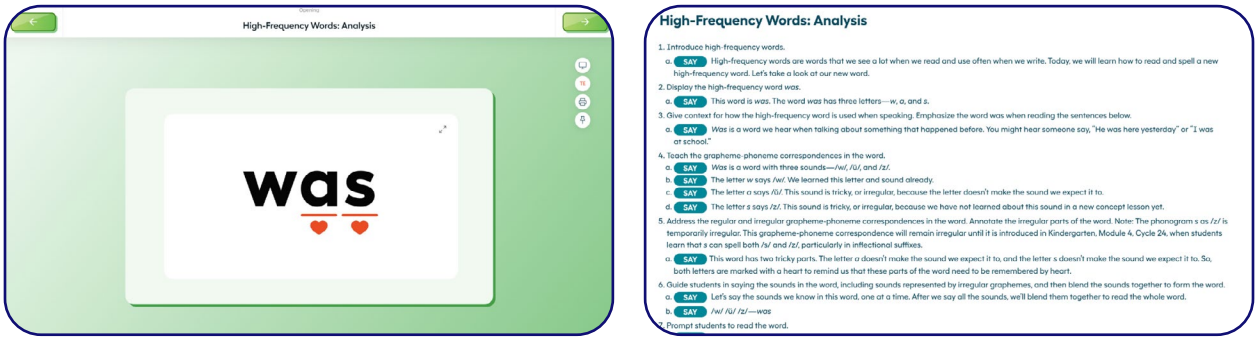
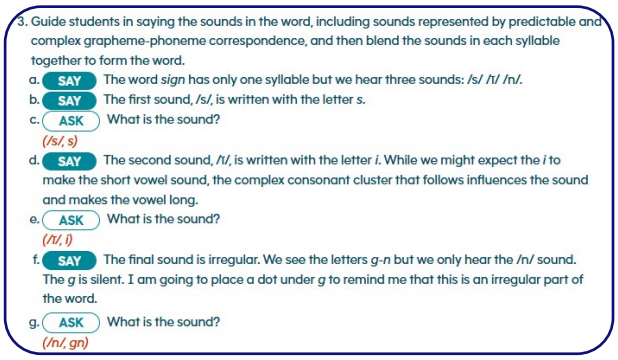


Figure 7. A High-Frequency Words: Analysis routine introduces students to the irregular high-frequency word 'was' from Foundational Skills Grade K, Module 3, Cycle 16, Lesson 2.

Foundational Skills emphasizes the increasingly automatic recognition of common high-frequency words. *Advanced Foundational Skills* extends this work to more complex words containing irregular or less common phoneme-grapheme correspondences. Students identify regular and irregular word parts, connect pronunciation and spelling to meaning and usage, and revisit words through decoding, encoding, fluency, and connected-text routines.

For example, an Irregular Word Introduction routine in *Advanced Foundational Skills* Grade 4 introduces the word *sign*. Students receive explicit instruction in its uncommon phoneme-grapheme correspondence and then apply the word across reading and writing contexts (see Figure 8).


3. Guide students in saying the sounds in the word, including sounds represented by predictable and complex grapheme-phoneme correspondence, and then blend the sounds in each syllable together to form the word.

a. SAY The word *sign* has only one syllable but we hear three sounds: /s/ /ī/ /n/.

b. SAY The first sound, /s/, is written with the letter *s*.

c. ASK What is the sound?

(/s/, s)

d. SAY The second sound, /ī/, is written with the letter *i*. While we might expect the *i* to make the short vowel sound, the complex consonant cluster that follows influences the sound and makes the vowel long.

e. ASK What is the sound?

(/ī/, i)

f. SAY The final sound is irregular. We see the letters *g-n* but we only hear the /n/ sound. The *g* is silent. I am going to place a dot under *g* to remind me that this is an irregular part of the word.

g. ASK What is the sound?

(/n/, gn)

Figure 8. *An Irregular Word Introduction routine from Advanced Foundational Skills, Grade 4, Module 3, Cycle 23, Lesson 2 introduces students to the word sign and provides explicit instruction identifying uncommon phoneme-grapheme correspondence.*

These instructional routines align with research indicating that automatic word recognition develops through repeated attention to the relationships among sounds, spellings, pronunciation, and meaning — not through memorization of words as undifferentiated visual forms (Ehri, 2014; Share, 1995). Repeated opportunities to encounter, analyze, read, spell, and write words across varied literacy experiences further strengthen orthographic mapping and increasingly automatic word recognition. As orthographic representations become more secure, students devote less cognitive effort to word identification and more attention to constructing meaning from increasingly complex text.

Morphology and Structural Analysis

Morphological awareness is the understanding that words are composed of meaningful parts, or morphemes, including prefixes, suffixes, roots, and base words. Knowledge of these structures supports decoding, spelling, vocabulary development, and reading comprehension by helping students recognize meaningful patterns within unfamiliar words and connect word form to meaning (Carlisle, 2010; Kieffer & Lesaux, 2012).

Morphology, therefore, serves as an important bridge between word recognition and language comprehension. As students encounter increasingly complex and multisyllabic words, knowledge of common roots and affixes can help them analyze how words are constructed, identify relationships among related words, and use meaningful word parts to support both pronunciation and interpretation (Anglin, 1993; Carlisle, 2000). Explicit instruction in morphology

and structural analysis can strengthen word reading, spelling, vocabulary, and comprehension, with these skills becoming increasingly important as students encounter more sophisticated academic and disciplinary language (Bowers, Kirby, & Deacon, 2010; Goodwin & Ahn, 2013).

Dragonfly in Practice: Morphology Activities

Dragonfly introduces morphological knowledge within the K–2 *Foundational Skills* program and extends this work systematically through Grades 3–5 *Advanced Foundational Skills*. Early instruction develops students' awareness of common, high-utility word parts and their effects on word form and meaning. As students' phonics and syllable knowledge becomes more sophisticated, morphology instruction expands to include increasingly complex prefixes, suffixes, roots, base words, and structural analysis.

For example, in Grade 2, Cycle 10, Lesson 5, students learn the prefix *mis-* through explicit teacher modeling (see Figure 9). Students begin with familiar base words such as *read* and *step* and examine how adding the prefix *mis-* changes the meaning of each word while preserving the structure of the base word. They then apply this understanding through guided word analysis, combining *mis-* with additional base words, reading the resulting words, determining the meanings in context, and using them in sentences.

This progression illustrates how morphology connects word structure with both reading and meaning. Students learn that meaningful word parts provide useful information for analyzing unfamiliar words rather than approaching each new word as an unrelated form. As morphological knowledge develops, students gain another strategy for reading, spelling, and interpreting increasingly complex words.

In *Advanced Foundational Skills*, students extend this work through explicit instruction in affixes, roots, base words, syllable patterns, and structural analysis. They analyze how meaningful word parts combine, examine relationships among morphologically related words, and apply this knowledge during decoding, encoding, vocabulary study, and connected reading.

By developing morphology systematically across the elementary grades, *Dragonfly* helps students move from recognizing individual word parts to using morphological structure strategically when reading, spelling, and interpreting unfamiliar words. In this way, morphology supports increasingly flexible word recognition while also creating an important connection to vocabulary and language comprehension.

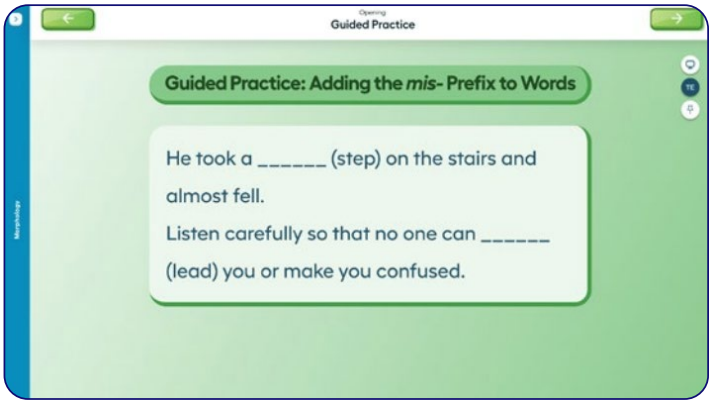


Figure 9. *A morphology activity from Grade 2, Module 2, Cycle 10, Lesson 5. Students read words containing the prefix mis- and determine their meanings in context.*

Fluency as a Bridge Between Word Recognition and Comprehension

Fluency is the coordinated ability to read accurately, efficiently, and expressively while maintaining attention to meaning. It includes accuracy and rate as well as prosody — the phrasing, emphasis, and intonation that reflect comprehension (Kuhn & Stahl, 2003; National Reading Panel, 2000; Rasinski, 2012).

Although fluency is closely supported by increasingly automatic word recognition, it is not solely a word-level process. Fluent reading requires students to coordinate decoding, automatic word recognition, oral language, syntax, and comprehension while reading connected text. In this sense, fluency serves as a bridge between the word-recognition and language-comprehension processes represented across major models of skilled reading.

Fluency develops through teacher modeling, guided oral reading, repeated reading, connected text practice, timely feedback, and frequent opportunities to read texts aligned to students' developing decoding abilities (National Reading Panel, 2000; Rasinski et al., 2011). These experiences help students build automaticity while maintaining accuracy, confidence, and comprehension, gradually shifting cognitive attention from effortful word identification toward constructing meaning across sentences and longer texts.

Dragonfly in Practice: Lift Off Decodable Books

Dragonfly develops fluency through repeated opportunities to apply newly learned skills in appropriately aligned texts. In K–2 *Foundational Skills*, *Lift Off* decodable books align directly to the phonics scope and sequence, allowing students to practice recently introduced sound-spelling patterns in controlled, connected text. In Grades 3–5 *Advanced Foundational Skills*, *Ascend* connected texts and *Wings* skills companions provide increasingly sophisticated reading experiences to apply advanced decoding, spelling, morphology, vocabulary, and fluency skills.

Across grades, students participate in teacher-modeled reading, guided oral reading, partner reading, repeated reading, sentence- and paragraph-level practice, and connected-text application. Teachers provide feedback on accuracy, phrasing, expression, and attention to reading.

By coordinating aligned text practice, oral reading, modeling, repetition, and feedback, *Dragonfly* helps students develop the automaticity and expressive reading needed to bridge accurate word recognition and deeper comprehension.

Dimension 2: Building Language Comprehension Through Knowledge, Language, and Reasoning

Dimension 1 focused on the word-recognition processes that allow students to read printed words accurately and with increasing automaticity. Skilled reading, however, also requires students to understand the language and ideas those words convey. Dimension 2 therefore focuses on the knowledge, language, and reasoning resources readers draw upon to construct meaning from text.

These resources include background knowledge, vocabulary and academic language, syntax and other language structures, understanding of text organization, and verbal reasoning (Cervetti & Wright, 2020; Duke & Cartwright, 2021; Hirsch, 2003). Together, they help readers connect new information to what they already know, interpret increasingly complex language, make inferences, recognize relationships among ideas, and integrate information within and across texts.

Importantly, this dimension focuses on the capacities that support comprehension rather than the literacy processes through which students express and apply their understanding. Writing, collaborative discussion, inquiry, and performance tasks draw on and further develop these capacities, but their role as integrated tools for learning and communication is addressed in Dimension 3.

The sections that follow therefore examine four major contributors to language comprehension: background knowledge; vocabulary and academic language; language structures and text complexity; and verbal reasoning and interpretation.

Dragonfly develops these comprehension resources primarily through the K–5 *Knowledge Building* program. Across coherent, sequenced topics, students accumulate background knowledge, develop academic and domain-specific vocabulary, encounter increasingly sophisticated language and text structures, and reason about ideas within and across texts. Together, these experiences strengthen the resources students need to construct meaning from increasingly complex language, texts, and disciplinary content.

Building Background Knowledge

Background knowledge supports comprehension by helping readers interpret unfamiliar ideas, make inferences, connect concepts, and retain new information (Hirsch, 2003; Willingham, 2006, 2017). Students with stronger topic knowledge are generally better able to understand complex texts and acquire related vocabulary because new information can be connected to existing conceptual frameworks (Cervetti & Wright, 2020; Hwang et al., 2020; Recht & Leslie, 1988).

The relationship between knowledge and comprehension is cumulative. Knowledge gained from one text prepares students to understand the next, and each subsequent encounter further strengthens the conceptual network available for future learning. Coherent, topic-based instruction therefore offers important advantages over disconnected passage practice (Cervetti et al., 2016).

Dragonfly Knowledge Building organizes instruction around coherent topics that develop conceptual understanding across science, social studies, history, literature, and other content areas. Rather than encountering a series of disconnected passages, students revisit related ideas, texts, vocabulary, questions, and disciplinary concepts across sequenced modules.

Each module follows a purposeful learning arc. Students first build foundational knowledge, then deepen understanding through reading, discussion, research, and writing, and ultimately apply what they have learned in an authentic performance task.

Dragonfly in Practice: Animal Defense Mechanisms

In Grade 4, students become experts on animal defense mechanisms. They begin by developing foundational knowledge through informational texts such as *Animal Behavior: Animal Defenses* by Christina Wilsdon. Students then select an "expert animal," synthesize information across multiple sources, and write an informative piece supported by evidence (see Figure 10).

The module culminates in a choose-your-own adventure narrative in which students accurately incorporate their animal's adaptations and survival strategies. Through this sequence, students repeatedly encounter related concepts and vocabulary while applying scientific knowledge through reading, research, informational writing, and narrative composition.

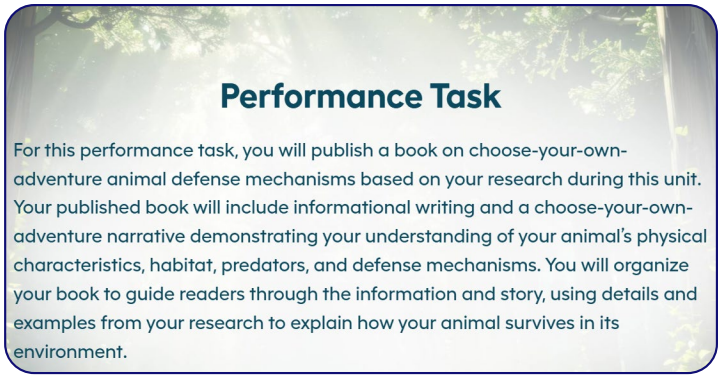


Figure 10. *Knowledge Building Through a Coherent Grade 4 Module on Animal Defense Mechanisms*

By integrating reading, writing, discussion, media, and inquiry within sustained topics, *Dragonfly* helps students build shared knowledge and the conceptual resources needed to engage successfully with increasingly sophisticated language and ideas.

Vocabulary and Academic Language

Vocabulary knowledge contributes directly to reading comprehension because students must understand the language of a text in order to construct meaning (Beck, McKeown, & Kucan, 2013; Snow, 2002). It also supports students' ability to make inferences, participate in academic discussions, interpret complex ideas, and communicate through speaking and writing (Nagy & Scott, 2000).

Vocabulary develops most effectively through sustained exposure to words in connected texts, discussion, writing, and inquiry rather than isolated memorization alone (Beck et al., 2013; Nagy & Townsend, 2012). *Dragonfly's* module structure supports these repeated encounters, while explicit instruction helps students analyze unfamiliar words, deepen word knowledge, and become increasingly independent word learners (Graves, 2006; Moats, 2020).

Dragonfly operationalizes these principles by embedding vocabulary and academic language development throughout the K–5 *Knowledge Building* program. Students encounter academic and domain-specific vocabulary repeatedly across texts and collaborative learning experiences while also receiving explicit instruction in word meanings, morphology, context clues, and word-learning strategies.

Dragonfly in Practice: Word Sums and Matrices

In Grade 4, students learn affixes such as *de-*, *re-*, *-ible*, and *-ion* alongside the Latin roots *flect* and *flex*. They use word sums and matrices to deconstruct and generate related words, including *defended*, *deflect*, *reflection*, and *flexible* (see Figure 11).

Students then apply this knowledge in connected texts, using recognizable word parts to analyze unfamiliar vocabulary, infer word meanings, and recognize relationships among related words. The instructional cycle culminates in independent application that reinforces morphology as a flexible word-learning strategy that supports vocabulary development and comprehension.

By integrating vocabulary instruction with coherent content learning, discussion, and writing, *Dragonfly* helps students build the academic language needed to understand complex texts and participate successfully in disciplinary learning.

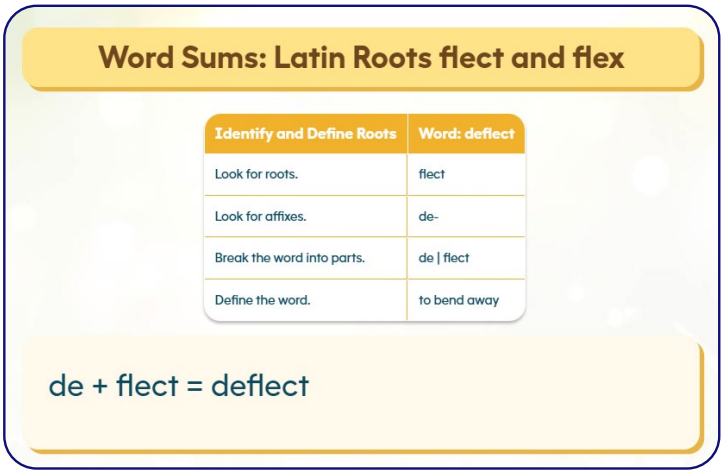


Figure 11. *A word sum routine introducing students to the Latin roots flect and flex from Advanced Foundational Skills Grade 4, Module 2, Cycle 10, Lesson 2.*

Language Structures and Text Complexity

Successful comprehension depends not only on vocabulary and background knowledge, but also on students' ability to interpret increasingly sophisticated language structures and navigate complex text organization (Scarborough, 2001; Snow, 2002). As students progress through the elementary grades, texts contain denser syntax, more abstract concepts, varied organizational patterns, and increasingly specialized language.

Readers must interpret relationships across clauses and sentences, connect ideas across paragraphs, recognize organizational structures, and understand how authors use language to communicate nuance, emphasis, and meaning (Shanahan, Fisher, & Frey, 2012). Difficulties with syntax and language structures can therefore interfere with comprehension even when students are able to decode words accurately (Perfetti, Landi, & Oakhill, 2005).

Explicit analysis of sentences and text structures within authentic literacy experiences helps make these language demands visible (Fang & Schleppegrell, 2010). Through repeated engagement with complex texts and structured language analysis, *Dragonfly* helps students develop the linguistic flexibility needed for increasingly advanced comprehension and disciplinary learning.

Dragonfly exposes students to literary, informational, poetic, and hybrid texts across varying levels of complexity. Close-reading routines, sentence-level language work, discussion, and writing help students examine how authors use syntax, organization, text features, and academic language to communicate relationships, perspectives, emphasis, and meaning.

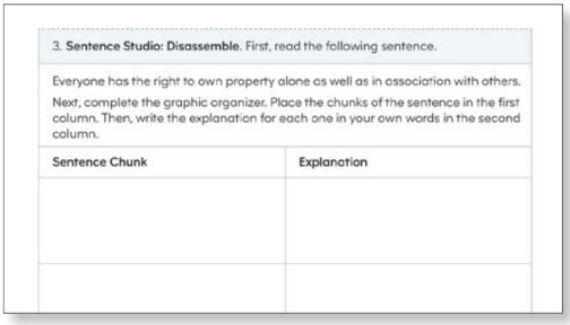
***Dragonfly* in Practice: Sentence Studio**

Sentence Studio provides explicit sentence-level instruction that helps students explore the nuance and structure of complex language. Students examine, deconstruct, interpret, and recombine sentences, strengthening comprehension and written expression simultaneously.

For example, in Grade 5, students analyze the sentence, "Everyone has the right to own property alone as well as in association with others" (see Figure 12).

Students then divide the sentence into meaningful chunks, explain the role and meaning of each part, and reconstruct the idea in their own words. This process directs attention to complex syntax, logical relationships, and academic language while requiring students to communicate their understanding precisely.

Example Sentence Studio Activity from Grade 5, Module 1, Unit 1, Lesson 9



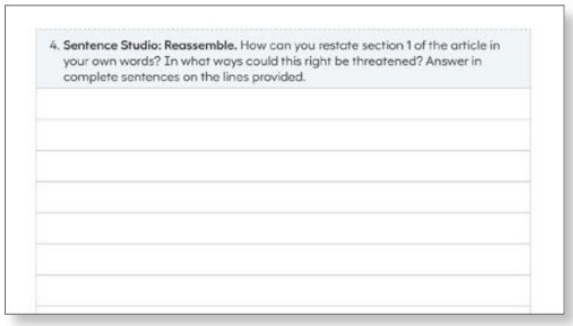
3. **Sentence Studio: Disassemble.** First, read the following sentence.

Everyone has the right to own property alone as well as in association with others.

Next, complete the graphic organizer. Place the chunks of the sentence in the first column. Then, write the explanation for each one in your own words in the second column.

Sentence Chunk	Explanation

First, students disassemble the sentence by breaking it into chunks and explaining each part.



4. **Sentence Studio: Reassemble.** How can you restate section 1 of the article in your own words? In what ways could this right be threatened? Answer in complete sentences on the lines provided.

Then, students reassemble the sentence by stating it in their own words.

Figure 12. *A Sentence Studio Activity from Grade 5, Module 1, Unit 1, Lesson 9 shows how the disassemble and reassemble steps of the activity work together to deepen understanding of complex syntax and academic language.*

By combining exposure to complex texts with explicit sentence-level analysis, *Dragonfly* helps students build the language knowledge needed to understand and communicate increasingly sophisticated ideas.

Verbal Reasoning and Comprehension

Skilled reading requires students to do substantially more than identify words and recall information from text. Readers must interpret implied meanings, make inferences, analyze relationships among ideas, evaluate evidence, interpret figurative language, and integrate information across increasingly complex texts and contexts (Duke & Cartwright, 2021; Shanahan et al., 2012).

These verbal reasoning processes become more demanding as texts include greater nuance, abstraction, and competing perspectives. Students may recall individual details while still struggling to construct a coherent interpretation if they have limited opportunities to explain, justify, compare, and revise their thinking.

Purposeful classroom discussion strengthens these abilities by asking students to use language as a tool for reasoning. Students deepen understanding when they explain ideas, support claims, respond to different interpretations, and build on the contributions of others (Murphy et al., 2009; Nystrand, 2006).

Dragonfly integrates verbal reasoning across reading, writing, inquiry, and collaborative discussion. Students interpret implied meanings, make inferences, analyze relationships, evaluate evidence, consider multiple perspectives, and support claims using information from texts and media. Structured discussion routines provide repeated opportunities for students to articulate and refine their thinking, listen closely to peers, revise interpretations, and use academic language in purposeful contexts.

Dragonfly **in Practice: Discussion Protocols**

Back-to-Back and Face-to-Face gives students time to reflect independently before participating in partner discussion. These routines support oral rehearsal, attentive listening, and increasingly precise explanation of ideas.

Think-Pair-Share allows students to process complex questions individually, test ideas with a partner, and refine their thinking before sharing with a larger group.

As students' discussion skills develop, they participate in Science Talks, where they use evidence from texts and media to explain their reasoning, respectfully challenge or build on classmates' ideas, and contribute to a shared understanding (see Figure 13).

Dragonfly's discussion routines therefore serve more than an engagement function. They develop oral language, evidence-based reasoning, active listening, and academic communication skills that support both reading comprehension and written expression.

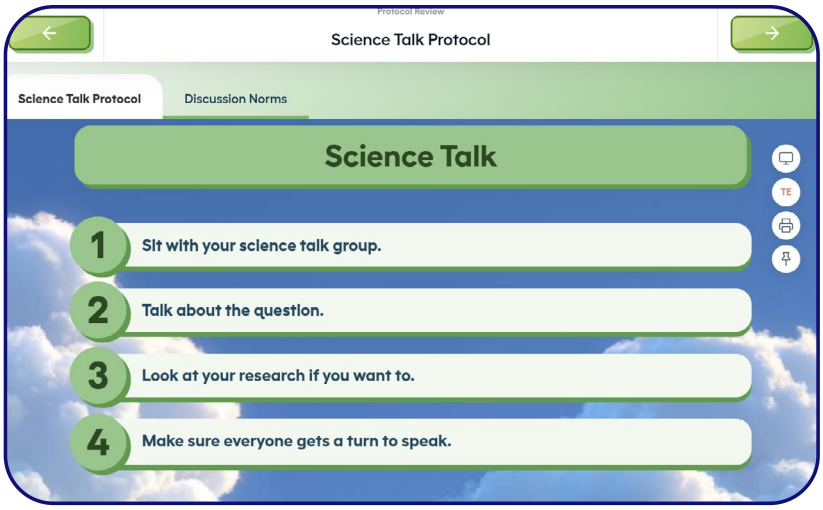


Figure 13. *A Science Talk protocol from Grade 2, Module 3, Unit 1, Lesson 11 shows the steps students will take to communicate knowledge with peers.*

Dimension 3: Applying and Integrating Literacy Through Writing, Discussion, and Inquiry

Dimensions 1 and 2 described the word-recognition and language-comprehension capacities that support skilled reading. Dimension 3 shifts from the development of these underlying capacities to the ways students use literacy to deepen, communicate, and apply what they know.

Reading does not operate independently from writing, speaking, listening, and inquiry. Students strengthen and extend understanding when they write to organize ideas, discuss to articulate and refine thinking, investigate questions across sources, and synthesize learning for particular purposes and audiences (Graham & Hebert, 2011; Graham, Hebert, & Harris, 2015; Shanahan, 2006). These processes provide opportunities for students to bring word recognition, language comprehension, knowledge, and reasoning together in purposeful literacy activity.

The sections that follow examine three ways this integration occurs: writing as a tool for thinking and comprehension; collaborative discussion and academic discourse; and inquiry and performance tasks as opportunities for purposeful literacy application.

Dragonfly integrates these processes throughout its instructional programs, with particular emphasis in *Knowledge Building*. Students use writing, discussion, research, and inquiry to develop ideas, communicate understanding, collaborate with others, and create products for defined purposes and audiences. In this dimension, the emphasis is not on the individual comprehension capacities themselves, but on how students coordinate and apply those capacities through literacy.

Writing as a Tool for Thinking and Comprehension

Writing requires students to transform ideas into organized language, making it a powerful tool for clarifying, extending, and consolidating understanding. When students write about what they read and learn, they must select relevant information, identify relationships, analyze evidence, synthesize ideas, and express their thinking with precision (Applebee & Langer, 2013; Graham & Hebert, 2011).

These processes can deepen comprehension because composing requires students to actively reorganize and connect information rather than simply recall it (Graham et al., 2015). Writing therefore serves both as a means of communication and as a mechanism for reasoning, knowledge building, and reflection.

Dragonfly operationalizes these principles by embedding writing throughout the K–5 *Knowledge Building* program. Students use writing to record observations, explain concepts, respond to texts, synthesize sources, construct arguments, reflect on learning, and communicate knowledge across genres and content areas. Writing remains connected to coherent module topics, giving students substantive knowledge and evidence to draw upon as they compose.

As students progress through *Dragonfly*, writing demands become increasingly sophisticated. Students move from brief responses and supported composition toward summarizing, explaining, synthesizing, arguing, researching, and communicating across literary and disciplinary contexts (Applebee & Langer, 2013). These experiences require students to coordinate reading, knowledge, reasoning, and language while developing increasing independence as writers.

Dragonfly in Practice: Grade 2 Plants and Pollinators

In the Grade 2, Module 4 performance task, students synthesize their learning about plants and pollinators by creating a seed packet for an authentic audience.

Students use the full writing process to plan, draft, revise, and publish an extended informative text. They then present their completed seed packets during a celebration of learning. The task requires students to integrate information from reading, discussion, and content study while communicating clearly for a specific purpose and audience.

This type of application reinforces literacy development because students must use reading and writing to organize knowledge, explain ideas, make decisions, and communicate understanding. It also makes the relationship between literacy, disciplinary learning, and real-world communication visible.

By integrating writing with reading, discussion, inquiry, and knowledge building, *Dragonfly* helps students use composition not only to demonstrate what they know, but also to deepen, organize, and communicate their understanding.

Collaborative Discussion and Academic Discourse

Discussion and academic discourse play an important role in literacy development because students deepen understanding by processing ideas collaboratively and communicating thinking through language (Murphy et al., 2009; Nystrand, 2006). Structured academic conversations provide opportunities for students to explain reasoning, justify interpretations, analyze evidence, ask questions, and refine understanding through dialogue. These interactions support comprehension by positioning students as active participants in meaning making rather than passive recipients of information.

The language demands of discussion also support broader literacy development. As students participate in conversations about texts and ideas, they learn to use increasingly sophisticated vocabulary, syntax, and disciplinary language while responding to multiple perspectives and building on one another's thinking (Wilkinson & Son, 2011). Oral language development and academic discourse are therefore closely connected to reading comprehension, reasoning, and written communication because students must learn to articulate complex ideas clearly and coherently across contexts.

Collaborative discussion can also strengthen engagement and student agency by positioning students as contributors to shared knowledge construction (Nystrand, 2006). Opportunities to ask questions, explain interpretations, and respond to peers help students clarify understanding while developing confidence in their ability to participate thoughtfully in academic learning.

Dragonfly operationalizes these principles through structured discussion routines and collaborative protocols embedded throughout the curriculum. Students engage in purposeful conversations that ask them to explain their thinking, support ideas with evidence, respond to peers, and refine understanding through dialogue.

Dragonfly in Practice: Class Clues

To prepare students for these collaborative experiences, lessons include Class Clues videos that model protocols such as Back-to-Back and Face-to-Face and Think-Pair-Share. These videos provide explicit examples of what respectful, evidence-based academic discourse looks and sounds like before students participate in the routine themselves (see Figure 14).



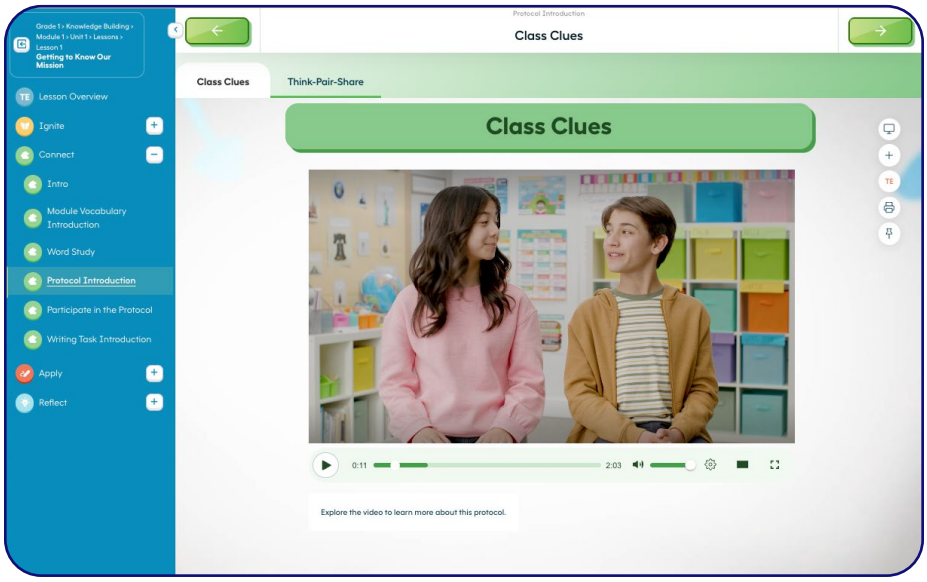


Figure 14. *Two students discuss the Class Clues protocol when the protocol is introduced in Grade 1, Module 1, Unit 1, Lesson 1.*

By combining explicit modeling with repeated opportunities for collaborative discussion, *Dragonfly* helps students strengthen oral language, reasoning, comprehension, and active participation in literacy learning.

Authentic Application and Performance Tasks

Authentic application supports literacy development by asking students to use reading, writing, speaking, listening, and reasoning to investigate questions, solve problems, and communicate ideas in purposeful contexts (Guthrie et al., 2012; Newmann & Wehlage, 1993). Literacy skills are more likely to deepen and transfer when students apply them in tasks that require synthesis, interpretation, collaboration, and communication rather than practicing them only in isolation (Guthrie et al., 2012; Newmann & Wehlage, 1993).

Inquiry-based learning provides a meaningful context for this integration. As students research topics, evaluate information, discuss ideas, and create products, they use literacy as a tool for learning and participation across disciplines (Palincsar & Duke, 2004). These experiences can deepen comprehension because students must revisit ideas, analyze evidence, synthesize information, and communicate their understanding in increasingly sophisticated ways.

Performance-based tasks further support independence and student agency by asking students to explain ideas, construct arguments, present findings, or create products for a defined purpose and audience (Darling-Hammond & Adamson, 2014). Such tasks make the relationship between literacy development and broader academic learning visible by positioning students as active participants in inquiry, knowledge construction, and communication.

Within the *Dragonfly Knowledge Building* program, students engage in inquiry, discussion, research, writing, and culminating performance tasks connected to coherent module topics

and purposeful questions. Each module culminates in a task that asks students to synthesize content knowledge, coordinate multiple literacy processes, and communicate for a meaningful purpose. Reading, writing, speaking, listening, collaboration, and reasoning are therefore not practiced as separate ends; they become tools for investigating topics, solving problems, and creating products connected to disciplinary learning.

***Dragonfly* in Practice: Feathered Friends Saver**

In Grade 1, Module 4, students apply what they have learned about birds and conservation by creating a Feathered Friends Saver. Students plan, draft, revise, and publish an opinion piece explaining why people should care for birds. They then display their bird-shaped writing on school windows, combining persuasive communication with a functional product intended to protect birds in their community.

The task requires students to draw on content knowledge, use evidence, develop and revise an opinion, consider an audience, and communicate for a genuine purpose. By applying literacy in service of a real-world goal, students demonstrate both what they have learned and how effectively they can use reading, writing, and communication to act on that knowledge.

Through performance tasks such as the Feathered Friend Saver, *Dragonfly* provides purposeful opportunities for students to integrate literacy, knowledge, inquiry, and communication while developing increasing independence as learners.

Dimension 4: Explicit Instruction, Differentiation, and Student Agency

Effective literacy instruction must be both clear and responsive. Students benefit from teaching that makes skills, concepts, and cognitive processes visible, while also receiving the scaffolds, feedback, and opportunities for independence needed to apply learning successfully across contexts.

Research indicates that instruction is especially effective when it is explicit, purposeful, cumulative, and responsive to demonstrated needs (Archer & Hughes, 2011; Rosenshine, 2012). Clear learning goals, teacher modeling, guided practice, timely feedback, cumulative review, and gradual release help students develop proficiency while reducing the likelihood that important processes remain implicit. Differentiation and ongoing formative assessment further allow teachers to adjust support without reducing access to rigorous grade-level instruction.

Literacy development also depends on students' increasing ability to regulate attention, monitor understanding, reflect on progress, persist through difficulty, and apply strategies independently (Duke & Cartwright, 2021). Opportunities for discussion, inquiry, reflection, choice, and authentic application help students develop greater ownership of their learning while strengthening engagement and self-regulation.

The sections that follow examine five interconnected features of *Dragonfly's* instructional design: explicit instruction and gradual release, differentiation and responsive support,

multilingual learner supports, student ownership and self-regulation, and responsive instruction and assessment.

Across all three programs, *Dragonfly* lessons make learning goals visible, model targeted processes, provide guided and independent practice, embed formative assessment, and create structured opportunities for reflection, collaboration, and increasing student agency.

Explicit Instruction and Gradual Release

Many literacy processes are not automatically visible to students. Decoding a multisyllabic word, analyzing syntax, evaluating textual evidence, organizing a written response, or participating in an academic discussion requires the coordination of multiple cognitive and linguistic processes. Explicit instruction helps make these processes visible by clearly identifying learning goals, modeling targeted skills and strategies, providing guided practice and feedback, and supporting students as they move toward independent application (Archer & Hughes, 2011; Rosenshine, 2012).

The gradual release of responsibility framework describes this shift in cognitive responsibility from teacher-led instruction toward guided, collaborative, and independent learning as students develop knowledge and proficiency (Fisher & Frey, 2013; Pearson & Gallagher, 1983). Fisher and Frey emphasize that this progression may include focused instruction, guided instruction, collaborative learning, and independent application, although these phases need not occur in a rigid sequence.

Together, explicit instruction and gradual release provide students with structured support while progressively increasing independence. By directing attention to the most important features of a task and reducing the need to infer unfamiliar processes independently, clear modeling and guided practice can reduce unnecessary cognitive demands (Sweller, 1988). As students gain proficiency, supports can be adjusted so that they assume increasing responsibility for applying skills and strategies across contexts.

Dragonfly incorporates this progression throughout its instructional programs. Lessons use teacher modeling, suggested language, think-alouds, worked examples, prompting questions, guided practice, corrective feedback, and opportunities for collaborative and independent application.

Teacher Editions provide detailed instructional guidance, including suggested language, think-alouds, prompting and follow-up questions, anticipated student responses, corrective feedback, and instructional notes. These supports help teachers make complex literacy processes explicit while preserving professional judgment and responsiveness to students' needs.

Dragonfly in Practice: A Shared Instructional Progression

Although lesson structures vary across the three programs, they share a common progression from instructional clarity and modeling toward supported practice, independent application, and reflection. This shared structure is adapted to the instructional purpose of each program (see Table 2).

Table 2. *Dragonfly Instructional Progression*

Shared Instructional Element	Purpose	Examples Across *Dragonfly*
Learning focus	Clarifies what students are learning and why	Learning Targets, lesson purposes, standards, and lesson overviews
Teacher Modeling	Makes skills, strategies, and thinking visible	Think-alouds, demonstrations, phonics models, sentence analysis, and modeled discussion routines
Guided Practice	Provides supported application with feedback	Prompting questions, anticipated student responses, corrective feedback, and Checks for Success
Collaborative Application	Allows students to rehearse, explain, and refine learning with peers	Partner practice, structured discussion, guided decoding and encoding, and collaborative inquiry
Independent Application	Supports transfer and increasing independence	Reading, writing, research, performance tasks, and connected-text practice
Reflection and formative assessment	Consolidates learning and informs next steps	Reflection prompts, progress checks, teacher observation, and embedded assessment

This progression aligns with research showing that students benefit when teachers clearly identify learning goals, model new processes, guide initial practice, provide feedback, and gradually support independent application (Rosenshine, 2012). Explicit instruction can also reduce cognitive load by directing students' attention to the most important features of a task (Sweller, 1988).

Knowledge Building Lesson Structure

Knowledge Building lessons typically move through Ignite, Connect, Apply, and Reflect. Ignite captures attention, activates relevant knowledge, and establishes the learning focus. Connect combines teacher modeling, reading, discussion, and guided sense making. Apply gives students opportunities to use knowledge and literacy skills with increasing independence, while Reflect consolidates learning and supports metacognition.

Foundational Skills Lesson Design

Foundational Skills lessons typically move through Drill, Opening, Work Time, and Reflect. Drill provides fast-paced cumulative review of phonological awareness, sound-spelling patterns, syllabication, and high-frequency words. Opening introduces the lesson focus and targeted skill. Work Time provides explicit modeling, guided practice, application, and formative assessment. Reflect helps students connect new learning to previously developed skills and consider their progress.

Advanced Foundational Skills Lesson Structure

Advanced Foundational Skills lessons organize instruction around phonics, encoding, morphology, and fluency. Within each component, students move through explicit modeling, guided practice, and application. Point-of-Use Differentiation and Checks for Success help teachers adjust support as students develop greater independence with multisyllabic word reading, spelling, meaningful word parts, and connected-text fluency.

Across the three programs, the instructional sequence is adapted to different content and developmental goals, but the underlying design remains consistent: learning is made explicit, practice is carefully supported, feedback informs next steps, and responsibility gradually shifts to students.

Differentiation and Responsive Support

Students do not develop literacy at the same pace or through identical pathways. Differences in background knowledge, language development, foundational skills, prior literacy experiences, and opportunities to learn mean that students often require differing levels of support, practice, and instructional intensity (Foorman et al., 2016).

Research consistently demonstrates that students benefit from targeted support, scaffolded instruction, cumulative review, and timely reteaching before learning gaps become more significant barriers to later reading comprehension and academic success (Connor et al., 2009; Fuchs & Fuchs, 2006). Responsive instruction is especially important because foundational literacy skills are cumulative and interconnected. Providing support as needs emerge helps reinforce developing skills while maintaining students' access to rigorous grade-level learning (Foorman et al., 2016).

Dragonfly embeds responsive support throughout daily instruction through embedded differentiation, assessment-informed instructional decisions, flexible grouping, and targeted opportunities for reteaching and extension. Rather than separating differentiation from core instruction, supports are integrated throughout daily lessons so teachers can respond to students' needs while preserving coherent, grade-level literacy experiences.

Differentiation Supports Across *Dragonfly*

Depending on the program and lesson, *Dragonfly* includes four primary categories of embedded support (see Table 3).

Table 3. *Differentiation Supports Across Dragonfly*

Differentiation Category	Purpose
Approaching	Provides targeted scaffolds that strengthen understanding and build confidence as students develop new skills and concepts.
Multilingual Learner	Supports language development and access to grade-level content while building on students' linguistic resources.
Beyond	Deepens learning through increased complexity, independence, and application rather than additional repetitive work.
Multisensory Supports	Reinforces learning through multiple modalities to strengthen understanding, retention, and transfer.

When the same instructional strategy is likely to benefit more than one group, *Dragonfly* may identify categories together, such as Approaching/Multilingual Learner. This design reduces redundancy while highlighting strategies that address shared instructional needs without treating the students themselves as interchangeable.

Each category provides practical instructional moves that teachers can use without changing the lesson's central objective or reducing its rigor. Together, these supports help teachers respond to learner variability while maintaining meaningful access to grade-level literacy instruction.

Dragonfly in Practice

Point-of-Use Differentiation

Point-of-Use Differentiation places instructional recommendations and scaffolds directly within lessons so that teachers can respond as needs emerge. Rather than requiring teachers to locate support in a separate intervention resource, relevant guidance appears alongside the instructional routine.

Embedded recommendations may include additional modeling, alternative representations, sentence frames, targeted prompts, partner support, multisensory practice, extension questions, or adjusted levels of independence.

Figure 16 illustrates Point-of-Use Differentiation within an *Advanced Foundational Skills* morphology lesson. The embedded guidance provides recommendations for supporting students during whole-group guided practice while preserving the lesson's focus on grade-level morphological analysis.



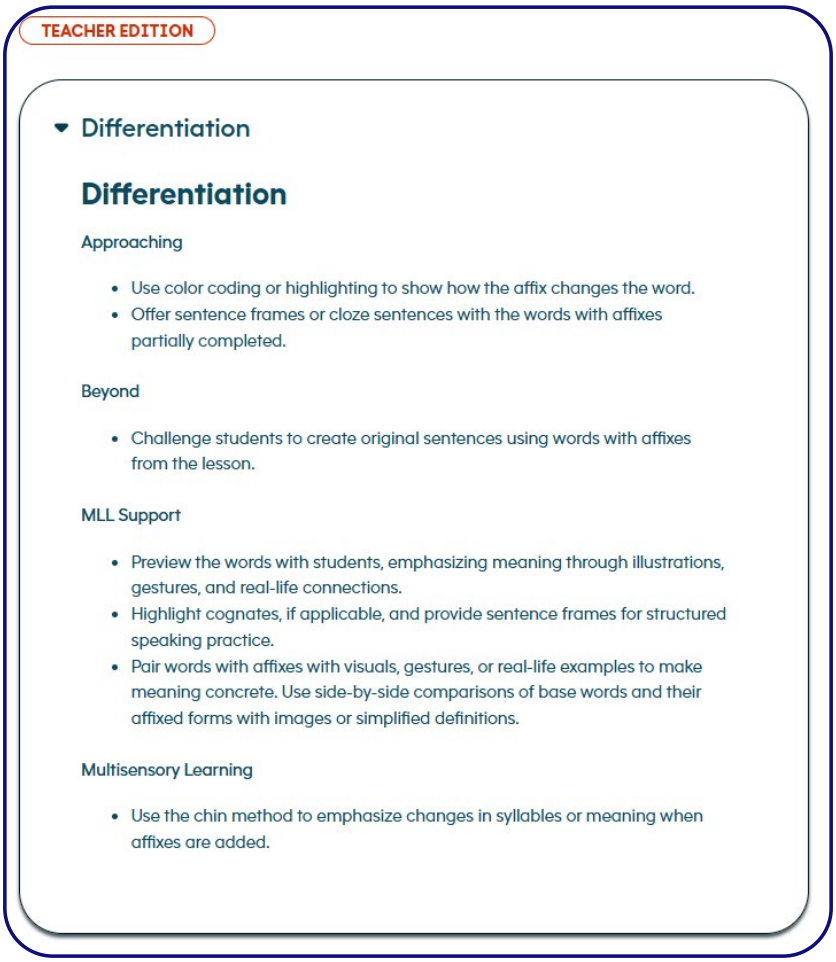


Figure 16. *A Point-of-Use Differentiation from Advanced Foundation Skills Grade 4, Module 2, Cycle 10, Lesson 1 shows the instructional recommendations and scaffolds to support whole group guided practice in a morphology routine.*

Assessment-Informed Small-Group Instruction

Across *Foundational Skills* and *Advanced Foundational Skills*, benchmark assessments, Skills Checks, and ongoing observations inform flexible small-group instruction. Teachers can use these structures to reinforce phonics, decoding, encoding, fluency, morphology, and other developing skills through targeted reteaching, scaffolded practice, and cumulative review.

In *Foundational Skills*, small-group instruction is organized around Dr. Linnea Ehri's phases of reading and spelling development (Ehri, 2005). Assessment data helps teachers align instruction with students' current stage of word-recognition development while supporting continued progress toward increasingly accurate and automatic reading.

Targeted routines build the knowledge and skills needed to move from pre-alphabetic reading toward consolidated alphabetic reading with increasing accuracy, automaticity, and fluency. *Advanced Foundational Skills* extends this responsive approach through targeted support in multisyllabic decoding, complex spelling patterns, morphology, structural analysis, and connected-text fluency.

Knowledge Building Flex Days

Within *Knowledge Building*, Mid-Unit Checks and embedded formative assessments help teachers identify concepts and skills that may require additional attention. Strategically placed Flex Days provide dedicated opportunities to revisit content, reteach skills, deepen discussion, and use differentiation scaffolds before students progress to new learning.

These structures help teachers respond to assessment evidence without fragmenting the coherence of the module or removing students from knowledge-rich, grade-level literacy experiences (see Table 4).

Table 4. *Dragonfly Differentiation Structure*

Structure	Purpose	Example
Point-of-Use Differentiation	Responds to student needs during instruction	Embedded teacher guidance and instructional scaffolds within lessons
Flexible Small Groups (FS/AFS)	Reinforces foundational skills	Small-group instruction informed by Ehri's developmental phases; targeted reteaching, scaffolded practice, and in cumulative review
Knowledge Building Flex Days	Revisits concepts before moving forward	Mid-Unit Check results guide reteaching, discussion, and additional practice

Effective differentiation is not a reduction of expectations. It is the intentional adjustment of support, representation, practice, and independence so that students can engage successfully with important learning goals.

Together, *Dragonfly's* embedded supports, assessment-informed grouping, and targeted opportunities for reteaching and extension help teachers respond to learner variability while maintaining coherent, rigorous literacy instruction across all three programs.

Multilingual Learner Supports

Multilingual learners develop literacy while simultaneously expanding proficiency in the language of instruction. They therefore benefit from opportunities to engage with rigorous

academic content alongside supports that make language, meaning, and participation accessible. Oral language development, vocabulary knowledge, comprehension, discussion, and sustained interaction with complex texts all contribute to literacy growth because language and literacy develop together (August & Shanahan, 2006).

Research on effective instruction for multilingual learners emphasizes the value of visual and multimodal resources, explicit vocabulary instruction, structured academic discourse, oral rehearsal, sentence-level language support, and scaffolded opportunities to engage with complex texts (August & Shanahan, 2006; Goldenberg, 2008). These supports help students participate in grade-level learning while continuing to develop academic language, background knowledge, and comprehension.

Throughout the *Dragonfly* curriculum, instructional supports are designed to help multilingual learners access complex content, participate in rich academic discourse, and strengthen language development across reading, writing, speaking, and listening. Rather than reducing the complexity of the content, these supports are designed to make language and participation more accessible while preserving access to rigorous, grade-level literacy experiences.

Embedded supports include:

- Explicit vocabulary instruction
- Visual and multimedia resources
- Sentence stems and language frames
- Collaborative discussion structures
- Teacher modeling
- Repeated oral rehearsal
- Multimodal representations
- Sentence-level language analysis
- Articulation supports
- Contextualized opportunities to use academic language



Together, these supports help multilingual learners participate fully in literacy instruction while simultaneously developing language, knowledge, and comprehension.

***Dragonfly* in Practice: Multilingual Supports Across the Curriculum**

Visual and Content Supports

In Grade 2 *Knowledge Building*, a Hands-On video provides visual context and explicit vocabulary instruction as students compare and contrast their own school with the Boat School in Bangladesh (see Figure 17). The multimedia resource helps students access unfamiliar content while supporting their use of comparison vocabulary and sentence structure during discussion and writing.

Foundational Language and Phonics Supports

In *Foundational Skills* Grade Kindergarten, students learn the sound-spelling correspondences *sh* as */sh/* and *th* as unvoiced */th/*. A Letter-Sound Card uses an embedded mnemonic — a sheep representing */sh/* — to reinforce the sound-spelling correspondence, while an Articulation Card visually models the mouth position used to produce */sh/* (see Figure 18).

Together, these resources support phonics learning, speech-sound awareness, pronunciation, and oral language development.

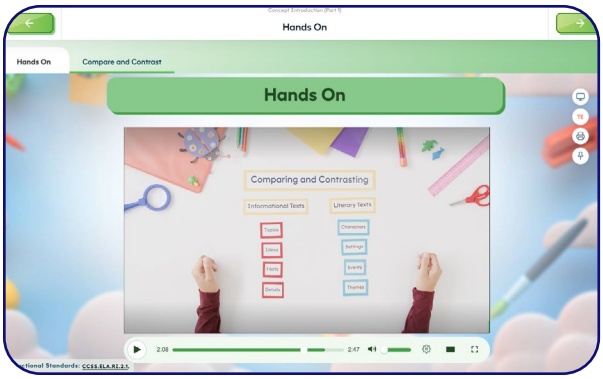


Figure 17. *A Hands-On video provides visual support and explicit vocabulary instruction as students learn to compare and contrast in Grade 2, Module 1, Unit 3, Lesson 1: Comparing and Contrasting My School and the Boat School in Bangladesh.*

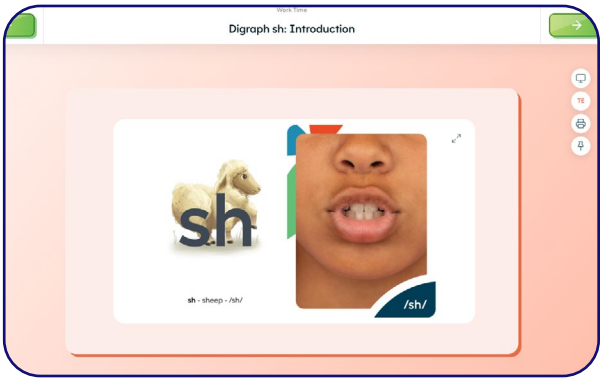


Figure 18. *In Foundational Skills, Kindergarten, Module 3, Cycle 15: sh as /sh/ and th as unvoiced /th/ Lesson 1: New Concept, a Letter Sound Card uses an embedded mnemonic (a sheep for /sh/) to reinforce the digraph–sound correspondence, while an Articulation Card visually models mouth position for producing /sh/.*

Sentence-Level Academic Language Supports

Sentence Studio helps students examine how words and phrases function within increasingly complex sentences by asking them to analyze, discuss, and reconstruct meaning. Rather than simplifying sophisticated language, the routine makes sentence structure visible so students can better understand and communicate complex ideas using increasingly precise academic language.

By embedding these supports across *Knowledge Building*, *Foundational Skills*, and classroom discourse, *Dragonfly* provides multiple pathways for multilingual learners to engage with complex literacy tasks while continuing to develop language proficiency.

In *Dragonfly*, multilingualism is treated as an instructional asset rather than a barrier. *Dragonfly's* scaffolds are designed to support full participation in substantive literacy

learning, not to replace rigorous, grade-level instruction with less demanding work. Through coordinated supports embedded across the curriculum, multilingual learners build language, knowledge, and literacy simultaneously.

Student Ownership and Self-Regulation

Literacy development depends not only on students' reading and language knowledge, but also on their ability to sustain attention, monitor understanding, apply strategies flexibly, persist through challenge, and participate actively in learning (Duke & Cartwright, 2021). Self-regulation, metacognition, motivation, and executive functioning all contribute to successful literacy development because students must coordinate multiple cognitive and linguistic demands while reading, writing, discussing, and interpreting increasingly complex texts (Cartwright, 2023).

Executive functioning — including working memory, cognitive flexibility, attention control, planning, and self-monitoring — helps students hold information in mind while reading, shift between decoding and comprehension processes, organize ideas, revise interpretations, and apply strategies across contexts (Cartwright, 2012; Diamond, 2013). When these processes are underdeveloped, students may struggle to sustain comprehension, manage complex tasks, or work independently even when their foundational reading skills are relatively strong.

Students benefit when instruction makes learning goals visible and provides structured opportunities for reflection, feedback, collaboration, and revision (Hattie & Timperley, 2007). Monitoring progress, explaining thinking, setting goals, and revising work can strengthen metacognitive awareness and help students become increasingly strategic and independent readers and writers.

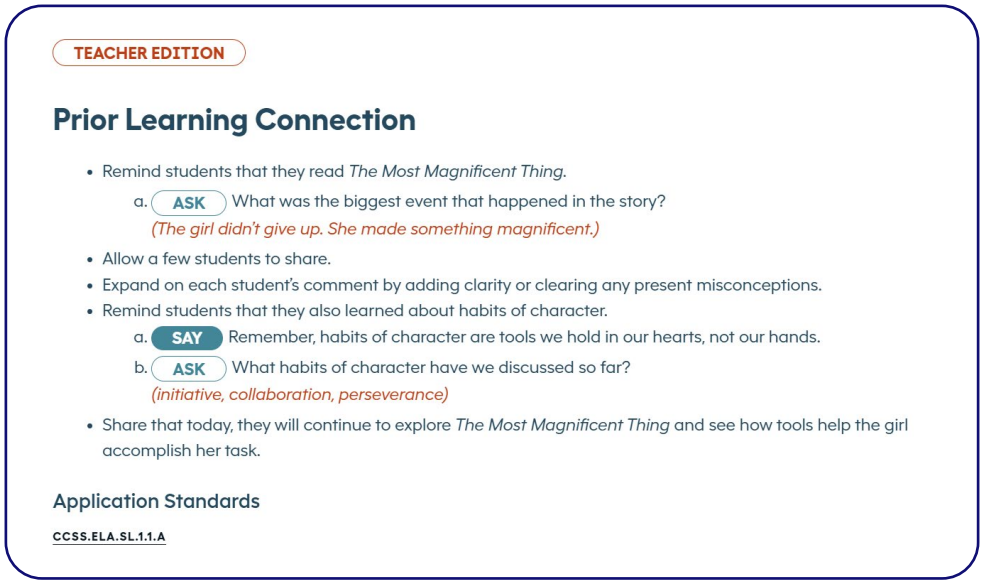
Students are also more likely to persist through challenging literacy tasks when learning is purposeful, collaborative, and connected to meaningful inquiry (Guthrie et al., 2012). Instructional environments that promote participation, reflection, and agency can therefore support both literacy growth and students' confidence in their ability to learn.

Dragonfly operationalizes these principles through Learning Targets, reflection routines, collaborative protocols, formative feedback, knowledge-building applications, and the intentional integration of Habits of Character. Across the curriculum, students are asked to monitor their progress, explain their reasoning, respond to feedback, revise their work, collaborate with peers, and apply literacy skills with increasing independence.

Habits of Character further support students in developing the dispositions of effective learners, ethical people, and contributors to a better world. By embedding these habits within literacy instruction, *Dragonfly* connects academic learning with persistence, responsibility, collaboration, and thoughtful participation.

Dragonfly in Practice: Habits of Character

Teacher Edition guidance in Grade 1 illustrates how Habits of Character are integrated into daily literacy instruction (see Figure 19). Students are supported in reflecting on how they participate in learning, interact with others, and contribute to shared classroom goals.


TEACHER EDITION

Prior Learning Connection

- Remind students that they read *The Most Magnificent Thing*.
  a. ASK What was the biggest event that happened in the story?
  (The girl didn't give up. She made something magnificent.)
- Allow a few students to share.
- Expand on each student's comment by adding clarity or clearing any present misconceptions.
- Remind students that they also learned about habits of character.
  a. SAY Remember, habits of character are tools we hold in our hearts, not our hands.
  b. ASK What habits of character have we discussed so far?
  (initiative, collaboration, perseverance)
- Share that today, they will continue to explore *The Most Magnificent Thing* and see how tools help the girl accomplish her task.

Application Standards

CCSS.ELA.SL.1.1.A

Figure 19. *Teacher Edition instruction in Grade 1, Module 1, Unit 1, Lesson 3 shows the intentional integration of Habits of Character embedded throughout instruction.*

By combining explicit learning goals, formative feedback, reflection, collaboration, and purposeful application, *Dragonfly* helps students develop the metacognitive awareness, persistence, and self-regulatory habits needed for increasingly independent literacy learning.

Responsive Instruction and Assessment

Responsive assessment practices help teachers identify developing needs, monitor progress, and adjust instruction before difficulties become significant barriers to later comprehension and academic learning (Foorman et al., 2016; National Center on Improving Literacy, 2022). Assessment is most useful when it is connected directly to instructional decision-making rather than treated as a separate event.

Dragonfly integrates assessment and instruction across its programs. Benchmark assessments, summative assessments, Skills Checks, and embedded teacher observations provide information about whether students are developing foundational skills accurately, applying those skills successfully in connected reading and writing, and progressing toward increasingly fluent and independent reading.

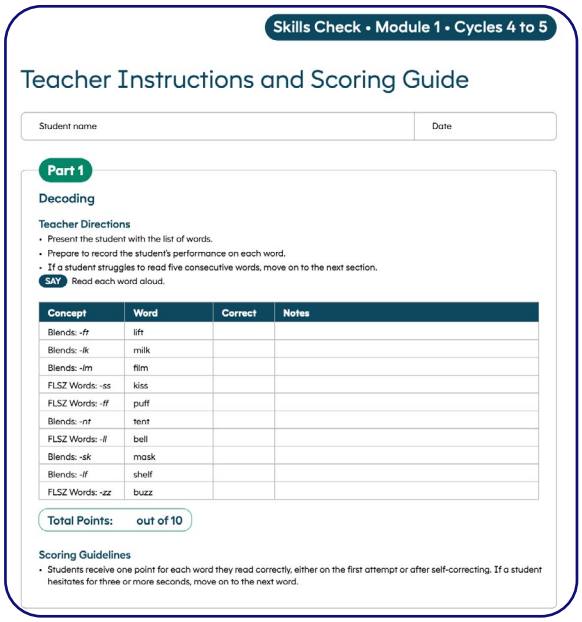
Assessment findings inform Point-of-Use Differentiation, flexible small-group instruction, cumulative review, and targeted reteaching. These structures help teachers determine when students are ready to progress and when they would benefit from additional modeling, guided practice, or scaffolded application.

Responsive instruction is especially important because students vary in the pace and pattern of reading development. Some students require additional opportunities for practice and review before skills become accurate, automatic, and transferable across contexts. Small-group instruction and differentiated supports can reinforce developing skills while maintaining access to grade-level literacy instruction and connected-text experiences (Foorman et al., 2016).

***Dragonfly* in Practice: Skills Checks**

In *Foundational Skills* Grade 1, Skills Checks assess students' developing decoding knowledge through word-reading tasks (see Figure 20). Results help teachers determine whether students have secured the targeted skills, are ready to move forward, or would benefit from additional instruction and practice.

By linking assessment evidence to timely instructional responses, *Dragonfly* helps teachers provide support aligned with students' demonstrated needs while maintaining coherent progress toward increasingly proficient and independent reading.



Skills Check • Module 1 • Cycles 4 to 5

Teacher Instructions and Scoring Guide

Student name | Date

Part 1

Decoding

Teacher Directions

- Present the student with the list of words.
- Prepare to record the student's performance on each word.
- If a student struggles to read five consecutive words, move on to the next section.

SAY Read each word aloud.

Concept	Word	Correct	Notes
Blends: *-ft*	lift		
Blends: *-lk*	milk		
Blends: *-lm*	film		
FLSZ Words: *-ss*	kiss		
FLSZ Words: *-ff*	puff		
Blends: *-nt*	tent		
FLSZ Words: *-ll*	bell		
Blends: *-sk*	mask		
Blends: *-lf*	shelf		
FLSZ Words: *-zz*	buzz		

Total Points: out of 10

Scoring Guidelines

- Students receive one point for each word they read correctly, either on the first attempt or after self-correcting. If a student hesitates for three or more seconds, move on to the next word.

Figure 20. *A Skills Check from Foundational Skills Assessments Grade 1, Module 1, Cycles 4-5, illustrating how decoding is assessed through word reading.*

Toward an Integrated Model of Literacy Instruction

Taken together, the dimensions of literacy development discussed throughout this paper reflect a central conclusion of contemporary reading research: skilled literacy develops through the coordinated interaction of word recognition, language comprehension, knowledge, reasoning, writing, discussion, and purposeful application. No single instructional component is sufficient on its own. Students benefit most when these processes are developed through coherent experiences that help them connect foundational skills with meaning, knowledge, communication, and increasingly independent literacy use.

This integrated perspective underscores the importance of instructional coherence across grades and programs. *Foundational Skills* supports the development of accurate and increasingly automatic word recognition. *Advanced Foundational Skills* extends this learning through multisyllabic decoding, encoding, morphology, structural analysis, and fluency. *Knowledge Building* strengthens background knowledge, vocabulary, language comprehension, reasoning, writing, and disciplinary learning.

These programs are designed to function as complementary parts of a unified literacy system. Students apply sound-spelling knowledge while reading connected text, use morphological knowledge to interpret unfamiliar academic language, draw on background knowledge to understand complex ideas, refine reasoning through discussion, consolidate learning through writing, and demonstrate understanding through inquiry and Performance Tasks.

Explicit instruction, assessment, differentiation, multilingual supports, reflection, and opportunities for student agency strengthen this integration by helping teachers respond to learner variability while maintaining access to rigorous grade-level instruction. Through this coordinated design, students move from early awareness of sound and print toward increasingly fluent, strategic, and independent engagement with complex texts and ideas.

Conclusion

Contemporary reading research makes clear that skilled literacy develops through the coordinated growth of word recognition, language comprehension, knowledge, reasoning, and increasingly independent literacy application. *Dragonfly* translates this research into a coherent K–5 instructional system that integrates *Foundational Skills*, *Advanced Foundational Skills*, and *Knowledge Building* while providing explicit instruction, responsive support, and sustained opportunities for students to read, write, discuss, inquire, and apply learning. Through this integrated design, *Dragonfly* is intended to support students in becoming increasingly knowledgeable, strategic, and independent readers, writers, speakers, and thinkers.

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