A Summary of the Research Base for Complete Comprehension
**Understanding as you’re reading helps you to engage with the text, read accurately, read with fluency, understand what the author is saying, and think beyond the text. In essence, comprehension is everything.**

—Jennifer Serravallo, *Understanding Texts & Readers*

With *Complete Comprehension*, Jennifer Serravallo operationalizes top-quality, peer-reviewed research, simplifying instruction and increasing clarity for classroom teachers. This research summary describes six key findings from more than 30 research studies and meta-analyses that Serravallo was informed by in the creation of *Complete Comprehension*’s instructional model. Before we address these six key findings and their application in this curricular resource, we would be wise to quickly review a few general points about comprehension research and theory.

**Understanding Comprehension**

Reading is a complex process. Teaching children to read is challenging in part because comprehension is largely invisible. Although we can tap into student thinking through the use of questions and prompts, we can’t be completely sure about what is happening inside the mind of a reader. In addition, different scholars and researchers offer a range of perspectives on what it means to “comprehend” a text, which can cause confusion for those doing the teaching.

Jennifer Serravallo writes in *Understanding Texts & Readers* (Heinemann, 2018) that her thinking about comprehension is most shaped by “proficient reader research.” This research was informed by cognitive psychology that appeared first in the 1980s and was used in professional texts throughout the 1990s and 2000s. It outlines how skilled readers interact with a text as they read and how teachers can explicitly teach related skills and habits of mind (Gordon and Pearson, 1983; Hansen, 1981; Duffy et al., 1987; Paris, Cross and Lipson, 1984; Afflerbach and Johnson, 1986). Proficient reader research suggests a student-centered middle ground for instruction amid many competing ideas.

**Beyond Comprehension**

Comprehension is, indeed, everything if we want students to become lifelong lovers of reading, but its importance hardly ends there. Investing time, materials, and energy in comprehension pays off across subject areas and throughout the school day. Comprehension supports accumulating background knowledge, critical thinking, connecting texts to other texts, and many other crucially valuable abilities that students need not only for college and career but for success in life in general. With both a fiction and a nonfiction version of *Complete Comprehension*, Serravallo supports student flexibility in applying skills no matter the text format or genre.

Her research base extends, however, well beyond comprehension itself. She relies on studies that make recommendations for teaching methods based on what research suggests are optimal instructional practices and conditions for learning. The combination of Serravallo’s sources yields an instructional framework whose simplicity belies the depth of its research base. She calls it ASSESS → EVALUATE → TEACH. While it surely describes a host of common, longtime assumptions that we all hold about good teaching, the particulars of the framework reveal how she turns research into action. The remainder of this research summary will describe how the six key principles she draws from the research contribute to and shape the implementation of this framework.

Separating the ASSESS and EVALUATE steps in *Complete Comprehension*’s instructional framework may be one of its most powerful and immediate applications of the research. We may argue semantically about whether they are two parts of the same process of knowing readers well. However, by articulating a separation, Serravallo forges a more explicit link between students’ needs and the specific and individualized teaching required to accelerate progress toward proficiency. Her skills progressions make that clearer and easier for teachers and the children they support.

Ultimately, these first two steps lead to TEACH and to more than 100 reading strategies in each of the fiction and nonfiction kits. Serravallo has popularized these in her *Reading Strategies Book*, and they provide a means of teaching into students’ zone of proximal development that is as accessible for the teacher as for the student (Serravallo, 2015).
Filling a Void

The famed researcher Richard Allington composed a foreword for *Complete Comprehension* that says a great deal about how it bridges a gap that researchers have recognized for years:

> Although elementary school educators have a variety of assessment tools for evaluating oral reading development, they have few tools for evaluating silent-reading development across the curriculum beyond standardized multiple-choice reading assessments. Because those tools are built upon short passages, it’s always been a leap of faith to think they tell us much about students’ comprehension of longer texts. For far too long, we’ve needed something more reliable. This is the primary reason everyone should welcome Serravallo’s Complete Comprehension.

As Allington points out, *Complete Comprehension* fills a void that relying exclusively on short texts creates.

The research supporting this resource is explored below. This robust foundation will provide a source of comfort and confidence for schools seeking a way to better know all their readers using authentic, whole, relevant texts and to teach with strategies that are meaningfully data-informed to propel students forward.

**PRINCIPLE ONE**

Goal-directed teaching and responsive feedback are key factors in helping students make the most progress in their reading comprehension.

The most powerful instruction in the classroom is instruction that is tied to individual students, and instruction that honors the skills students are both applying independently and ready to begin working on. The benefits of goal-directed instruction continue to increase when teachers invite students into the goal-setting process because when students are invested in meeting their goals, they become more open to receiving feedback on their performance (Hattie and Timperley, 2007). Involving students in goal setting and keeping their individual interests in mind strengthen students’ motivation and engagement (Guthrie and Klauda, 2014), thus increasing their overall achievement (Guthrie et al., 1999).

A common challenge for teachers doing this work is determining individual reading goals that match individual students, and then making sure those goals are actionable and achievable. *Complete Comprehension* offers teachers a way to pinpoint skills students use while reading and skills that need additional support. Once the students’ individual reading goals are determined through a teacher’s evaluation of student responses during a whole-book assessment, *Complete Comprehension* guides teachers in clearly naming the goal or goals that align with the work each reader would benefit from most, and offers strategies tied to those goals.

As students and teachers engage in a goal-directed approach, students’ work toward deeper comprehension along skills progressions becomes visible. Teachers can provide in-the-moment, responsive feedback to help students know what to work on next. “For goals to be effective, people need summary feedback that reveals progress in relation to their goals. If they do not know how they are doing, it is difficult or impossible for them to adjust the level or direction of their effort or to adjust their performance strategies to match what the goal requires” (Locke and Latham 2002, 708). Related to those findings, Hattie and Timperley (2007) assert that providing feedback is different than providing instruction, yet when the two are closely aligned, students benefit most. This implies that feedback has the greatest impact on students’ learning when the feedback relates to how to engage with a task, or goal, more effectively. “Effective feedback from teachers to students has an effect size of 0.75, meaning that it is a robust method for spurring learning. But if feedback is not timely, specific, understandable, and actionable, the promise of feedback will not be realized” (Frey, Fisher, and Hattie 2018, 48). Fortunately, *Complete Comprehension* helps teachers not only specify and elucidate reading goals they might set for their readers, it also supports teachers in providing students with appropriate strategies and feedback as they work to meet their goals.

To read more about the impact of goal-directed teaching and feedback on student learning, consult the following sources:


Whole-book comprehension is assessed best by reading whole books, not short texts.

If students read whole chapter books and works of nonfiction, then it's important for teachers to know how well they comprehend and to pinpoint where their comprehension needs support. When teachers rely only on short-passage assessments, the assumption is that the work a student does while reading a few hundred words correlates with the work that student will do while reading a book with dozens of pages. However, a reader's comprehension of a short passage can differ dramatically from that of a longer text, like a chapter book. This can be explained when considering how the length and density of a text increases the overall difficulty of a text (White, 2011). Specifically, length and density of a text refers to the total number of words in the entire text. And as the number of words within a text increase, so too does the difficulty of reading and comprehending the text (White, 2011).

Longer texts require students to use an increasing amount of reading stamina. Hiebert, Wilson, and Trainin (2010) define reading stamina as “the ability to sustain attention and proficiency across a text” (63). Hiebert, Wilson, and Trainin (2010) hypothesize that stamina can become problematic for readers if they become fatigued while reading extended texts. “Considerable attention is required on the kind of experiences that underlie consistency in silent reading, particularly the stamina that is required to sustain interest and comprehension through extended texts” (Hiebert, Wilson, and Trainin 2010, 72). And “for readers who find a text challenging, greater length may bring increasing fatigue,” further impacting their comprehension (Mesmer, Cunningham, and Hiebert 2012, 246).

Hiebert et al. (2010) also highlight the incongruence between assessments used in elementary classrooms and a task students engage in regularly—sustained silent reading. The brevity of short-passage reading assessments cannot determine how students manage their strategies and comprehension while sustaining their involvement in a longer text. Students need “considerable support if they are to sustain attention to the texts and tasks of daily classroom life” (Hiebert, Wilson, and Trainin 2010, 73). Related to this is the way comprehension varies depending on the text and task. “By examining students’ abilities to comprehend across several different combinations of texts and tasks, teachers can learn about students’ abilities to adjust and adapt to novel reading situations in which their knowledge, expertise, and interest vary substantially” (Valencia, Wixson, and Pearson 2014, 286). Complete Comprehension offers teachers the opportunity to see what students comprehend across a chapter book of the students’ choice, thereby making the text and task more authentic and student-choice driven.

Related to the discrepancies between assessments and comprehension is how often emerging readers specifically are assessed on their oral reading abilities “rather than on their silent reading proficiency” (Allington and McGill-Franzen 2010, 51). The impact of such a practice results in focusing most of the instruction on improving readers’ oral reading accuracy and fluency rather than on their ability to comprehend the texts at hand (Allington and McGill-Franzen, 2010). Fortunately, Complete Comprehension allows teachers to assess their students’ comprehension beginning in texts that start at F&P Text Level Gradient™ Level J.

One advantage to consider when administering a whole-book assessment is that students select a text of their choice from the collection provided in Complete Comprehension and then read the text during the independent reading portion of the school day. Thus, administering this comprehension assessment does not interfere with or take time away from students’ time independently reading. A typical short-passage reading assessment requires students to pause their reading and sit alongside their teacher, while the protocol in Complete Comprehension allows students to retain their independent reading time. The significance of this is paramount since the amount students read, in and out of school, is associated with higher comprehension (Guthrie et al., 1999). Considering the statistically significant impact on comprehension when teachers increase the time students spend reading in class (Guthrie et al., 1999), it is important to note how a whole-book assessment folds into independent reading time rather than takes away from it.

Another advantage of how Complete Comprehension is administered is that it uses printed children’s literature. Studies show differences in students’ comprehension when they read print books versus digital mediums. In her comprehensive book, Reader, Come Home: The Reading Brain in the Digital World, Maryanne Wolf (2018) calls attention to this phenomenon. “The sequencing of the sometimes easily overlooked details in a fictional story appeared to be lost by the students who were reading on a digital screen” (77). This research underscores the impact of digital media on the developing brains of children. Wolf suggests “possible changes in digital readers’ relationship between attention and different forms of memory, again with a potential downstream effect upon children’s comprehension and their deeper thinking about what they’ve read” (116). While teachers continue to compete for students’ attention with screens and technology, it’s important to consider the cited research while evaluating the amount and the kinds of texts used for assessment and instructional purposes. Fortunately, Complete Comprehension addresses these factors and the
research by offering students full-length print texts to best determine their reading comprehension.

Where a running record alone cannot and does not account for the work a reader must do across an entire text, Complete Comprehension can. By offering students whole books (not passages) to read, Complete Comprehension unveils the meaning that students make throughout an extended text, taking into account reading stamina and comprehension. It then goes one step further than other resources to pinpoint the specific comprehension goals that students might focus on within their self-selected texts while also offering a host of strategies a teacher can use to help students reach those goals.

For more information related to the impact of text length on stamina and comprehension, read the sources listed below:


**PRINCIPLE THREE**

When students choose what to read and can select texts that are relevant to them, we can develop a more accurate understanding of their comprehension.

When students engage with relevant texts that are personally meaningful to them and have the tools to navigate the complexities of the text, they comprehend the contents on a deeper level (Guthrie and Klauda, 2014). These factors help sustain students’ perseverance with a text, helping them stay engaged in the work needed to deepen their understanding. Conversely, when these factors of relevance, significance, and competence are not present, students tend to read on a more literal level (Guthrie and Klauda, 2014). Complete Comprehension offers choice and relevance, as inclusivity and diversity were considered for the texts that students can choose from while engaging in the assessment.

Guthrie, Wigfield, Metsala, and Cox (1999) state that “a constraint in text comprehension is the lack of curiosity about the topic being read” (252). But when students choose the material they read, the experience is motivating. And as students feel motivated to read, there is an increase in the amount they read, “which then increases text comprehension” (Guthrie et al. 1999, 150). When students have choices about what they read, they are motivated to read, which helps to improve their comprehension, making the act of reading more engaging and can lead to a higher frequency of reading. And as students are motivated to increase the amount they read, there is a corresponding increase in their reading comprehension (Guthrie et al. 1999; Naeghel et al., 2012).

By activating student choice and interest, teachers learn the types of texts and topics that students in their classes prefer. That anecdotal information aids teachers in ongoing support with book selection and classroom library curation. The texts that students choose to read in class should be relevant to them and hold meaning. Research shows that when students do not see themselves in the books and curriculum they engage with, they can feel marginalized and separated from the material (Kesler, 2011).

When teachers “capitalize on student interest,” they not only increase motivation for the task, but the cumulative result elevates students’ critical thinking skills (Frey, Fisher, and Hattie 2018, 47). When teachers offer students choices that include engaging, relevant texts, motivation and comprehension are positively impacted.
To read more about the impact of choice and relevance on comprehension, refer to the following resources:


PRINCIPLE FOUR

Readers benefit from explicit teaching of comprehension strategies.

Before discussing the merits of strategy instruction, it is important to consider how none of these factors relating to comprehension exist in a vacuum. When students are given feedback about how well they are applying specific reading strategies they have been taught, they show significant improvement in strategic reading and continue to use the strategies in other times and settings (Schunk and Rice, 1992; Nelson and Manset-Williamson, 2006). It is the in-the-moment feedback and guidance from the teacher during a conference or small group that empowers students to effectively use strategies in their independent practice.

Robertson, Dougherty, Ford-Connors, and Paratore (2014) highlight the importance of tapping into motivation before diving into strategy instruction. Once teachers engage students in the learning process and build on their motivation, then they can intensify their instruction by providing explicit strategies that target students’ needs in order to deepen their work along a progression (Robertson et al., 2014; Guthrie and Klauda, 2014). This is especially important when one considers how challenging the work of developing deep comprehension can be. As students learn to decode with high accuracy, their thinking oftentimes “remains superficial, sometimes limited to retelling or remembering details or facts,” making it imperative for teachers to scaffold students’ work around comprehension (Fountas and Pinnell 2013, 271).

What follows can be thought of as a motivation loop. When students receive explicit strategy instruction in reading and also time to practice using the strategies, they improve their performance, and they also experience an increase in motivation (McCrudden, Perkins, and Putney, 2005). “Having self-efficacy and interest along with knowledge of strategies can provide students with the ‘will’ and the ‘ways’ when encountering challenging tasks” (McCrudden, Perkins, and Putney, 2005). When teachers tap into students’ motivation while engaging in strategy instruction, the resulting achievement continues to motivate students after the initial instruction is over.

Complete Comprehension offers teachers hundreds of goal-focused strategies to support readers, and considers the large role that responsive feedback, motivation, and choice play in student achievement. The research also points to the motivating force that explicit strategy instruction plays in student learning. When students know what to do and how to do it, their self-efficacy benefits along with their overall comprehension.

To read more about the impact of strategy instruction on student learning, refer to these sources:


A robust body of research supports that the most effective teachers model and explain strategies to support students in their reading comprehension (Taylor et al., 2003; Gelzheiser et al., 2011; Allington, 2013; Allington, 2002). These findings link back to the importance of strategy instruction while also highlighting the need for teacher expertise. And research shows that the kind of strategy matters: Teachers have the greatest impact on student learning if they teach higher-level comprehension skills while maintaining a strong level of engagement (Taylor et al., 2003). Ultimately, if “cognitive strategies are indispensable avenues to conceptual knowledge,” then teachers must be able to select the appropriate strategies, model them clearly, and engage students in this challenging work in order to keep them motivated (Guthrie, 1996, 434).

Other factors increase teacher effectiveness, as well. They include devoting the majority of the day to reading and writing, providing students with texts they can and want to read, modeling strategy instruction, engaging in accountable talk around texts, supporting students in authentic reading processes (e.g., reading entire books rather than worksheets), and using testing and assessments to inform ongoing instruction (Allington, 2002; Sanden, 2012). These factors are all folded into the protocol, process, and materials of Complete Comprehension.

Matching students with books and strategies to meaningfully engage with those books requires that teachers have a depth of knowledge around text complexities, reading goals, and instructional practices. The importance of matching students with texts they can and want to read is underscored, especially considering how often teachers give students books that are too difficult for them to decode and comprehend (Allington, 2013; Allington, 2009; Allington, 2002). Developing expertise in this area requires a great deal of professional learning and development.

Fortunately, Complete Comprehension provides two layers of support. The teacher-as-instructor layer provides a depth and breadth of tools for teachers to use to determine students’ reading comprehension, reading goals, and to measure the progress students make toward those goals.

The teacher-as-learner layer highlights the power of professional development on teachers’ professional practices and students’ achievement. Scanlon, Gelzheiser, Vellutino, Schatschneider, and Sweeney (2011) found that professional development around best practices in literacy can have statistically significant effects on student learning, most likely due to a deepening of teachers’ understanding around the importance of school time devoted to reading and data-driven small-group work. By evaluating students’ responses and using that data to further instruction, teachers using Complete Comprehension can deepen their understanding and strengthen their literacy practices and ability to correctly match students with appropriate goals and texts. Ball and Cohen (1996) emphasize the impact of aligning curriculum materials and teacher’s guides with professional learning: “such learning would help teachers to be more rather than less informed, and to become more thoughtful professionals with more choices” (13). And that is what Complete Comprehension does: It empowers students to read books that they can and want to read, while also empowering teachers to establish goals for their readers and then help them work toward reaching those goals.

To learn more about the impact of teacher expertise on student learning, refer to these sources:


Learning progressions give students (and teachers) clear pathways to deepen their learning

Goal-directed teaching and the use of feedback are effective only if teachers are able to accurately gauge the level of challenge of the work in which they engage students (Frey, Fisher, and Hattie, 2018). When teachers determine the correct level of challenge, the effect size is 0.72, “nearly doubling the speed of learning” (Hattie, 2012; Frey, Fisher, and Hattie, 2018). Any effect of 0.40 or higher is effective, and anything 0.80 or higher is equivalent to two-years’ growth. Thus, for feedback to have a powerful effect on students’ learning, it must relate to misconceptions rather than a lack of understanding—that is, it’s more effective to teach into a student’s zone of proximal development rather than take a deficit-based approach (Hattie and Timperley, 2007; Locke and Latham, 2002). Hattie (2007) explains how when providing feedback relating to unfamiliar or overly challenging material, the feedback may potentially have a negative impact on students. Collectively, this research underscores the importance for teachers to determine where to set goals and begin instruction—otherwise, the feedback becomes irrelevant (and possibly detrimental).

To effectively support students in strengthening their reading skills, there are several steps teachers must take—steps that are provided in Complete Comprehension. First, teachers must help students understand their “current learning status,” so they can determine what knowledge they possess and what knowledge they must acquire (Frey, Fisher, and Hattie, 2018, 48). Second, they need students to be willing to engage in the work ahead while also understanding how to tackle the work (Frey, Fisher, and Hattie, 2018). This relates to the embedded relationship between motivation, goal setting, and strategy instruction. The third step is inviting students to monitor their own progress and adjust their behavior accordingly (Frey, Fisher, and Hattie, 2018). This protocol is all greatly aided by the use of the learning progressions in Complete Comprehension.

Learning progressions elucidate the trajectory of work as that work becomes increasingly sophisticated. When teachers use learning progressions with students, they clarify the steps students can take to deepen their reading comprehension. And in doing so, the learning progressions provide teachers with professional development in which they, themselves, internalize the progression of a given skill, giving them greater insight before, during, and after instruction. The progressions in Complete Comprehension were created by carefully studying student work around particular skills and then naming the differences between each level of work in the sequence. When teachers share that information with students by showing them where their work falls along the continuum, educators make next steps visible for students. These purposeful, incremental steps that students can take in their reading development, guided by the use of learning progressions outlined in Complete Comprehension, allow them to see what they currently know, where they need to go, and the specific actions they can take to achieve that new learning.

For additional information about how learning progressions help students deepen their understanding, consult the following sources:


