A NEW PRIORITY

Comprehension Intervention in the Primary Grades

Katherine A. Dougherty Stahl

he phrase fourth-grade slump was coined to describe the difficulties that some children experience as they shift from learning to read to reading to learn (Chall, Jacobs, & Baldwin, 1990). These difficulties were typically the result of an increase in the volume and density of reading material that students encountered in the intermediate grades, causing them to hit a perceptible comprehension wall. However, primary-grade teachers who emphasize high-level comprehension of complex texts in order to meet the demands of the Common Core State Standards (CCSS) are now seeing young children hit comprehension thresholds that had only been visible among older readers. Word recognition, fluency, prior knowledge, vocabulary, and self-regulation are a few of the pressure points that influence a reader's comprehension threshold (S.G. Paris & Hamilton, 2009; Perfetti & Adlof, 2012). These factors work in tandem with classroom context factors (e.g., level of support, purpose for reading) and text factors (e.g., genre, content, structure, vocabulary, density) to yield incremental levels in students' depth of understanding.

As teachers in the primary grades have begun to expose children to a variety of complex texts, an instructional challenge has surfaced. Even when the teacher assumes the burden of text reading, other pressure point vulnerabilities may result in low levels of comprehension for some students. When young children have developmentally appropriate word recognition skills but need more support with text comprehension, many schools struggle to provide them instruction that will create long-term comprehension outcomes. Currently, primary-level reading interventions tend to focus on word recognition skills or reading increasingly difficult leveled texts. Additionally, most schools do not have enough reading specialists or speech-language therapists with both

the expertise and the time to provide comprehensionspecific intervention in the primary grades.

Diagnostic assessment and progress monitoring also pose challenges. Unlike tests for word recognition, there are no simplistic tests (or one-minute measures) capable of identifying strengths and weaknesses in the comprehension of young children. Multiple pressure points contribute to a child's comprehension threshold. Therefore, schools must assess both listening comprehension and reading comprehension to fully understand a child's needs (Stahl & García, 2015).

The time and expertise needed to work with young children are likely to stress schools that are already strained beyond existing resources in order to meet the comprehension needs of children in the intermediate grades who must do well on high-stakes tests. Today, comprehension problems are showing up in the early grades because teacher read-alouds and shared reading of complex texts expose the children's difficulties. However, this problem is still too new for most schools to have solutions in place.

When Common Sense and Effort Don't Yield Benefits

Peach Grove Elementary (pseudonym) is a well-resourced school with three knowledgeable, hardworking literacy specialists. Several years ago, they developed a Cubs' Club to provide a vocabulary intervention for kindergartners with the lowest scores on the vocabulary subtest of their school entry test. However, when the literacy specialists reviewed longitudinal data, they were disappointed and surprised by what they found. Almost without exception,

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children who participated in the Cubs' Club vocabulary intervention did not achieve proficiency on the high-stakes English language arts test later in elementary school.

These teachers had used data wisely in identifying children who needed supplementary language instruction. However, rather than using the data as a large-grain indicator of need, they had translated the outcomes into a small skill set curriculum. Teachers provided intervention that was built around isolated vocabulary and language skills (e.g., prepositions, following multistep directions) rather than large-grain networks of knowledge and semantic vocabulary clusters.

Pear Alley Elementary (pseudonym) took a different screening approach in kindergarten and first grade. Literacy specialists used their leveled reading benchmark assessment data. Children who were able to read the text accurately (above 90%) but unable to provide a subjectively ranked story retelling were held back from moving to the next sequential text level. Unfortunately, this process overidentified comprehension difficulties in good readers. Keeping proficient readers in easier text levels inhibited multiple areas of reading growth rather than strengthening comprehension.

Flaws in daily instructional procedures and testing protocols caused many children to appear to have comprehension difficulties. During guided reading groups, children were not habitually retelling the short text to a partner after

reading. Retellings occurred collaboratively and sporadically during instruction. The benchmark test script did not provide children with a prereading directive to think about the book during reading as a cue to the postreading retelling. Most children gave a conscientious oral reading performance and then were not mentally prepared to retell at the end because that was not their reading purpose. Pear Alley used a popular commercial benchmark kit that did not have text-specific questions or text-specific retelling guides with quantitative scoring guides or technical data. As a result, testing processes, scoring, and data interpretation were subjective and erratic.

Both of these schools were well intentioned, used data to inform supplementary instruction, and used valuable resources to support small groups of students who needed help comprehending or communicating their comprehension. However, their efforts did not yield outcomes that justified the level of resource investment.

Identifying Children Who Need More

Identifying mastery of foundational skills is a straightforward process. Children read and write words with specific orthographic patterns or read for one minute for teachers or literacy specialists to gauge automaticity and consolidation of word recognition processes. In assessing comprehension, both listening and reading tasks that require children to retell and answer text-specific questions on

carefully analyzed texts must be administered and interpreted.

Many schools administer some form of benchmark assessment of oral reading to ascertain a reading level. That is a good starting point when combined with classroom data such as analysis of errors and self-corrections on running records of oral reading. If schools are using benchmark kits for this purpose, some testing criteria must be established (Stahl & García, 2015). The benchmark kits must have scripts that cue children before reading that a retelling and questioning will follow the text reading. There must be standardized scoring guides for retelling particular text elements and questions that are unique to each test booklet to ensure consistent scoring within a grade-level cohort. Technical data describing the field-testing procedures, demographics of the children who formed the field-testing sample, and the resulting data for each benchmark booklet should be provided to ensure the trustworthiness of the assessment kit.

The Qualitative Reading Inventory-6 (Leslie & Caldwell, 2016) is an individually administered informal reading inventory that provides thorough diagnostic information about a reader's listening and reading comprehension. Although the test is not psychometrically norm-referenced, the chapter describing the technical development of the inventory contains valuable information that can be used to provide

"Diagnostic assessments that ascertain the nuances of the child's comprehension difficulties are needed." confidence in the reliability and validity of a trained tester's interpretive decision making. For example, one might think that a student who is only retelling 33% of the story's idea units has comprehension problems. However, an examination of technical data reveals that during field testing, the mean retelling for children reading the test passage at the instructional level was only 23% of the idea units. Therefore, the child who retold 33% of the idea units did better than average compared with children in the field-testing sample.

Beyond the screening process, diagnostic assessments that ascertain the nuances of the child's comprehension difficulties are needed. These tasks are resource intensive and need to be reserved for a small percentage of children who teachers and screening tasks have identified as needing additional support to make sense of texts. Sulzby's (1985; McKenna & Stahl, 2015) classification scheme is an excellent measure to use in preschool and kindergarten to determine a child's ability to formulate a cohesive text-based narrative from a story that was read to him or her. For kindergartners and older students, the Narrative Comprehension of the Wordless Picture Book Task (McKenna & Stahl, 2015; A.H. Paris & Paris, 2003) provides a vast amount of data about a child's sense of narrative story structure as well as explicit and inferential comprehension without the interference of decoding. Finally, teachers should check with the speechlanguage therapist to enlist his or her help and assessment resources.

Interventions to Improve Narrative Comprehension

One of the easiest ways to bolster comprehension instruction for young children is to intensify the quality and quantity of interactive read-alouds conducted by adults both at school and at

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home (see Stahl, 2014; Stahl & García, 2015). Robust research evidence indicates that providing a small-group interactive read-aloud intervention will increase performance in comprehension, general language abilities, vocabulary, and phonological awareness for children with literacy difficulties and more severe specific language impairment (Desmarais, Nadeau, Trudeau, Filiatrault-Veilleux, & Maxès-Fournier, 2013; Swanson et al., 2011; Van Kleeck, Vander Woude, & Hammett, 2006; Whitehurst et al., 1994).

In today's busy classrooms, it is not unusual for a teacher to conduct a one-time whole-class read-aloud and discussion of a complex text. The first step in intervening would be to deliver follow-up small-group lessons for one to four low-performing students that provide explicit instruction and opportunities to talk about that text. Explicitly teaching narrative story structure, causal connection, inference generation, and theme identification is important because these elements are the crux of narrative comprehension and they transfer to reading. Such an intervention should be conducted two to four days a week for 15-30 minutes, depending on the children's age. The same storybook might be reread two to eight times as determined by student enjoyment, engagement, and level of comprehension.

Adaptations for Younger Children

Whitehurst and colleagues (1994) developed effective dialogic reading routines

for use with 4- and 5-year-old children. PEER (prompt, evaluate, expand, and repeat) is a mnemonic for remembering the goals of dialogic reading. A reminder of the types of questions that should be used is the acronym CROWD (completion, recall, open-ended, *wh*-, and distancing questions that connect the book to life outside the book).

In prekindergarten and kindergarten, volunteers and parents can be trained to provide additional dialogic reading both at home and at school. Training should always include videos so that the parents, volunteers, or practitioners have an opportunity to revisit key points and effective application of the procedure (Whitehurst et al., 1994).

Theme Identification Instruction for Novice Readers

The CCSS emphasize theme identification. Children often have difficulty identifying the universal theme of a story because this requires going beyond the text to retrieve other relevant stories and relevant human experiences. Williams and colleagues (2002) found that explicit instruction enabled novice readers, including children from high-poverty homes and children with reading disabilities, to identify themes in novel texts read independently.

This protocol calls for teaching children common themes such as "Never give up," "Be honest," "Be helpful," and "Don't be greedy." After engaging children in high-level questioning during and after the shared reading of a story,

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the classroom teacher or the interventionist asks theme-based questions ("What lesson did the characters learn? What should we learn from this story?"). Finally, the teacher or interventionist asks transfer questions to link the shared classroom story to other texts and life experiences (Williams et al., 2002). Transfer questions ask children when it was easy, hard, and important for them to apply the story's lesson in their lives. Children also generate other books and movies that teach the same lesson. Conducting the theme-based questioning in small-group discussions ensures that students are engaged and receiving the practice they need in orally expressing their understanding.

Interventions to Improve Informational Text Comprehension

We often encounter children who have trouble comprehending because they have not had the world experiences needed to acquire the knowledge and vocabulary that is essential for making sense of school texts. The interventions described in this section were designed to support children's concept development, disciplinary vocabulary, and early reading skills.

Vocabulary-Centered Interventions

World of Words (Neuman, Newman, & Dwyer, 2011) and PAVEd for Success (Schwanenflugel et al., 2010) were both successfully implemented in preschool and kindergarten classrooms. After

validating the success of these protocols, the researchers published sets of CCSS-aligned lesson materials in convenient, easy-to-read guidebooks (see Hamilton & Schwanenflugel, 2011; Neuman & Wright, 2013).

Both interventions share many common characteristics that might be combined to create sets of daily 15-20-minute lessons built within two-week themed content units such as insects or transportation. Lessons open with a brief song or poem and always include a short teacher read-aloud about the topic followed by discussion. Most daily lessons include labeling and sorting picture cards; other activities on various days include viewing and discussing short videos about the topic, journal writing, and student conversations about the topic. Lessons might be provided by an interventionist, as a station by a coteacher, or as a literacy block add-on by the classroom teacher to elevate the achievement of the whole class when screening tests indicate that many children in the classroom lack networks of knowledge and essential vocabulary.

Strategic Processing Interventions

Collaborative strategic reading is a small-group intervention that can be used to support novice readers who are reading informational texts. It has a long, strong track record of improving fluency and comprehension for all readers, including English learners and children who have reading disabilities (Klingner & Vaughn, 1996; Vaughn

et al., 2000). Four comprehension strategies are taught individually before a small student-led discussion is held. During the discussion of each section of text, the children apply these strategies:

- Preview the upcoming section
- Click and clunk, or self-monitor for fluent reading and meaningmaking hurdles
- Get the gist
- Wrap up after reading all sections of text

As with all strategy protocols, the goal is to comprehend the text, not to apply strategies rigidly and mindlessly.

Direct instruction of expository text structures using graphic organizers and paragraph frames is effective with novice readers (Graham & Harris, 2005; Williams, Stafford, Lauer, Hall, & Pollini, 2009). Although this might be introduced in the classroom, children with reading difficulties benefit from the explicitness, support, time, and engagement afforded in a small group. Using visual representations and verbal cues to show the intersections between the organization of knowledge and texts promotes learning and transfer.

Closing Thoughts

Early interventions are designed to provide instructional supports before the students' needs become so vast that they are impossible to identify, much less remediate. We always hope that early intervention will eliminate student failure and the need for more sustained, expensive support. That is not always the outcome. The dynamic interaction of the pressure points that contribute to comprehension tend to yield more enduring student vulnerabilities than we might expect for foundational skills. Therefore, only research, resources, and time will

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reveal to us the long-term impact of providing comprehension intervention for our emergent and novice readers.

REFERENCES

- Chall, J.S., Jacobs, V.A., & Baldwin, L.E. (1990). The reading crisis: Why poor children fall behind. Cambridge, MA: Harvard University Press
- Desmarais, C., Nadeau, L., Trudeau, N., Filiatrault-Veilleux, P., & Maxès-Fournier, C. (2013). Intervention for improving comprehension in 4–6-year-old children with specific language impairment: Practicing inferencing is a good thing. *Clinical Linguistics & Phonetics*, 27(6–7), 540–552.
- Graham, S., & Harris, K.R. (2005). Writing better: Effective strategies for teaching students with learning difficulties. Baltimore, MD: Brookes.
- Hamilton, C.E., & Schwanenflugel, P.J. (2011). PAVEd for Success: Building vocabulary and language development in young learners. Baltimore, MD: Brookes.
- Klingner, J.K., & Vaughn, S. (1996). Reciprocal teaching of reading comprehension strategies for students with learning disabilities who use English as a second language. The Elementary School Journal, 96(3), 275–293.
- Leslie, L., & Caldwell, J.S. (2016). *Qualitative Reading Inventory*–6. New York, NY: Pearson.
- McKenna, M.C., & Štahl, K.A.D. (2015).

 Assessment for reading instruction (3rd ed.). New York, NY: Guilford.
- Neuman, S.B., Newman, E.H., & Dwyer, J. (2011). Educational effects of a

- vocabulary intervention on preschoolers' word knowledge and conceptual development: A cluster-randomized trial. *Reading Research Quarterly*, 46(3), 249–272.
- Neuman, S.B., & Wright, T.S. (2013). *All about words: Increase vocabulary in the Common Core classroom, pre-K*–2. New York, NY: Teachers College Press.
- Paris, A.H., & Paris, S.G. (2003). Assessing narrative comprehension in young children. *Reading Research Quarterly*, 38(1), 36–76.
- Paris, S.G., & Hamilton, E.E. (2009). The development of children's reading comprehension. In S.E. Israel & G.G. Duffy (Eds.), *Handbook of research on reading comprehension* (pp. 32–53). New York, NY: Routledge.
- Perfetti, C., & Adlof, S. (2012). Řeading comprehension: A conceptual framework from word meaning to text meaning. In J.P. Sabatini, E.R. Albro, & T. O'Reilly (Eds.), Measuring up: Advances in how we assess reading ability (pp. 3–20). Lanham, MD: Rowman & Littlefield Education.
- Schwanenflugel, P.J., Hamilton, C.E., Neuharth-Pritchett, S., Restrepo, M.A., Bradley, B.A., & Webb, M.Y. (2010). PAVEd for Success: An evaluation of a comprehensive preliteracy program for 4-year-old children. *Journal of Literacy Research*, 42(3), 227–275.
- Stahl, K.A.D. (2014). Fostering inference generation with emergent and novice readers. *The Reading Teacher*, *67*(5), 384–388.
- Stahl, K.A.D., & García, G.E. (2015). Developing reading comprehension: Effective instruction for all students in pre-K-2. New York, NY: Guilford.
- Sulzby, E. (1985). Children's emergent reading of favorite storybooks: A developmental

- study. *Reading Research Quarterly*, 20(4), 458–481.
- Swanson, E., Vaughn, S., Wanzek, J., Petscher, Y., Heckert, J., Cavanaugh, C., ... Tackett, K. (2011). A synthesis of read-aloud interventions on early reading outcomes among preschool through third graders at risk for reading disability. *Journal of Learning Disabilities*, 44(3), 258–275.
- Van Kleeck, A., Vander Woude, J., & Hammett, L. (2006). Fostering literal and inferential language skills in Head Start preschoolers with language impairment using scripted book-sharing discussions. *American Journal of Speech-Language Pathology*, 15(1), 85–95.
- Vaughn, S., Chard, D., Bryant, D., Coleman, M., Tyler, B., Linan-Thompson, S., & Kouzekanani, K. (2000). Fluency and comprehension interventions for third-grade students. *Remedial and Special Education*, 21(6), 325–335.
- Whitehurst, G.J., Epstein, J.N., Angell, A.L., Payne, A.C., Crone, D.A., & Fischel, J.E. (1994). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology*, 86(4), 542–555.
- Williams, J.P., Lauer, K.D., Hall, K.M., Lord, K.M., Gugga, S.S., Bak, S.J., ... DeCani, J.S. (2002). Teaching elementary school students to identify story themes. *Journal of Educational Psychology*, 94(2), 235–248.
- Williams, J.P., Stafford, K.B., Lauer, K.D., Hall, K.M., & Pollini, S. (2009). Embedding reading comprehension training in content area instruction. *Journal of Educational Psychology*, 101(1), 1–20.