

## Bookworms Evidence of Effectiveness

When you are cooking with good basic skills and a fantastic set of ingredients, you can usually expect a good meal. Visitors to our kitchens, though, know that this is not *always* true. Bookworms is built only from evidence-based practices: vocabulary and spelling instruction, supported repeated readings for different purposes, brief comprehension modeling during reading and listening, extensive text-based discussions, text-based writing, text structure instruction, and differentiated attention to foundational skills. But actually, the most important ingredient is the books themselves. High-quality fiction and nonfiction drive the train; evidence-based instructional routines are the tickets that allow teachers and children to ride.

We wish we could say with certainty that this curriculum has proved to be effective. We cannot. Such a claim can only be made after a true experiment, in which many classrooms are randomly assigned either to Bookworms or a comparison condition. This we have not yet done. We have, however, established its feasibility and gathered considerable evidence of promise.

**Feasibility.** For curricular innovations to be effective, they first must be feasible. That means that the lessons must fit into the time allowed for instruction, teacher planning and preparation must be reasonable, and the lessons must be engaging enough to keep children interested and on task. We have witnessed feasibility in at least 30 different school settings. We have observed and given feedback, modeled lessons ourselves, and worked with teachers in face-to-face and online coaching environments. By all accounts, Bookworms is different from typical practice, but it is entirely feasible. (To see Bookworms in action, please view the video modules on our free professional learning site: [ComprehensiveReadingSolutions.com](http://ComprehensiveReadingSolutions.com).)

To be feasible, a program must also be affordable. Bookworms is very inexpensive. Teachers need a set of trade books to read aloud, another set for children to read, and differentiation materials. We estimate that these items cost approximately \$1,500 per classroom in the upper elementary. Teachers also need lesson plans, but these are free to download. The differentiation materials can be purchased for about \$500 per set, and upper-elementary teachers can share one set at each grade level because very few students need the lowest-level materials. Finally, teachers need four professional books: *How to Plan Differentiated Reading Instruction: Resources for grades K-3*, *Differentiated Reading Instruction in Grades 4 and 5*, *Teaching Beginning Writers*, and *Developing Strategic Writers through Genre Instruction*. Each of these costs less than \$30; again, teachers can share.

**Evidence of Promise.** Our first Bookworms district was Staunton City Schools in Staunton, Virginia. It was there that we collaborated with teachers to choose the books and there that we first saw the lessons in action. Staunton City began implementation in 2011. They first saw gains in foundational skills for the K-2 children, but by 2015 they were seeing gains in grades 3-5 as well. Pass rates on the

Virginia Standards of Learning test rose to 72% – an historic high. These results earned a Districts of Distinction award from *District Administration* magazine: <http://www.districtadministration.com/dod/awards/responding-rigor-literacy-innovation>.

Our next Bookworms district included all three elementary schools in Jefferson County, Georgia. Each had a long history of weak achievement and nearly all families suffered the effects of poverty. Jefferson County had been awarded a Georgia Striving Readers grant to improve literacy instruction, and after their initial year the district chose Bookworms. Because the grant required the district to collect fluency and comprehension data (DIBELS Next Oral Reading Fluency and Lexiles from the Scholastic Reading Inventory), we were able to compare growth in the years before and after Bookworms. Results were extraordinary. Students who read more challenging text at higher volume made greater gains than they had the previous year, when they were matched to their instructional reading level and received a greater focus on skills.

Let's unpack this finding. In grades 3-5, over 50% of participants began the Bookworms year with weak fluency and over 65% with weak comprehension. Although we used challenging texts, as the standards require, fluency and comprehension growth was greater during the Bookworms year than during the previous year, and effects were relatively uniform across grade levels. Of the 14 counties participating in Georgia Striving Readers that year, Jefferson ranked 2nd in fluency growth for third and fourth grade and 1st for fifth grade; they ranked 1st for comprehension growth in third and fifth grade and 2nd in fourth grade. The next year, data for more comparison districts was available, and Jefferson third graders ranked 2nd of 20 in fluency growth and 7th of 20 in comprehension; fourth grade ranked 1st of 15 in fluency growth and 1st of 20 in comprehension; fifth grade ranked 5th of 15 in fluency and 2nd of 20 in comprehension. As cohorts, third and fourth graders in year one experienced this strong comparative growth two years in a row.

We earned a federal grant to continue our work with Jefferson teachers and to add wide reading from books linked to the curriculum (either by author or theme). In the second half of the 2015-16 school year, 51 classroom teachers sent us their classroom library checkout records. Data indicated that 6,131 books were checked out – more than 120 per classroom. Consequently, we know that these students, who have been reading only from high-quality texts for three years, choose to read widely. We are also currently analyzing the relationship between reading achievement and persuasive writing quality for them.

Once Jefferson's gains were revealed to Georgia Striving Readers schools, many other districts came on board. We cannot track growth in all of them, but we have visited many. We can say with confidence that thousands of students are reading and writing at high volumes in challenging texts, and that hundreds of teachers are adopting a new set of routines to support them. We can also affirm that growth and

implementation are related. Our observations reveal that teachers whose student scores are growing less tend not to implement the program as well as their peers. At the district level, the schools with relatively weaker growth tend to have fewer hands-on administrators. The Jefferson teachers, once struggling to serve their children, now implement well and routinely host visitors who want to see Bookworms in action. They are supported by strong administrators at both the building and district level. They (and we) are proud of their work.

In 2015-16, Seaford, Delaware, schools adopted Bookworms. Seaford is the poorest of Delaware's districts, and was under pressure from the State Department of Education to increase achievement. Delaware uses Smarter Balanced as its outcome measure. In the year before implementation, 36% of grade three students were proficient, 42% of grade four, and 44% of grade five. After Bookworms was implemented, 52% of third graders were proficient, 49% of fourth graders, and 50% of fifth graders. More exciting to us was that the number of students at the highest proficiency rating increased from 15% to 23% across the upper elementary grades.

Two of our four Seaford schools were recognized by the Department of Education for outpacing the rest of the state in growth at grades 3-5 – with 19 and 13% increases in proficiency with just one year of implementation. One of those schools was also recognized statewide for success with African American children. Before Bookworms, 32% of African American children met the proficiency benchmark; after Bookworms, 58% did. The state's overall average for all children in upper elementary was 57%. We are now working with Seaford to improve the writing component of the curriculum and to problem solve for students learning English. We are interested to see if these gains can be replicated in a second year. Teachers and administrators are confident that they will be, and are starting the new school year celebrating state recognition for achievement instead of being singled out for weak performance.

**Continuing Research.** We now know a great deal about the advantages Bookworms affords. We know that the program is feasible for teachers and students who begin the year with very weak achievement. We know that during implementation their reading and writing improve. We know that it is affordable, especially compared with commercial programs. But there are many questions about Bookworms we can't answer yet. Most Bookworms districts have been relatively small, but beginning in fall 2016 districts with 15 elementary schools are beginning this journey. It may be that district size does not matter, or it may be that there is more implementation and achievement variation among schools when there are more of them. Also, we are just beginning to work with urban schools. We hope that we will learn additional implementation lessons from them. Finally, we don't know whether Bookworms is a good choice for a high-achieving district. We tend to advise schools not to try to fix what isn't broken.

Thank you for the time you spend trying to use education dollars wisely and to make the best choices for your teachers and children. Over time, we hope that

Bookworms will be one of many good options for schools.