



# WKEC: The BookStart Project Final Report



Presented by: The Evaluation Consulting Group

This final report examines the progress made by the BookStart project in achieving its goal and objectives and evaluates its impact on the literacy skills of students' pre-K through second grade in Fulton County, KY.

An IAL grant project from the West Kentucky Educational Cooperative, funded by the U.S. Department of Education

## Table of Contents

|  |    |
|--|----|
| <b>Background</b> .....  | 2  |
| <b>Project Purpose, Goal, and Objectives</b> .....                 | 3  |
| <b>Data Collection &amp; Analysis</b> .....                        | 3  |
| <b>Academic Data Elements</b> .....                                | 3  |
| Brigance Early Childhood Kindergarten Screen III.....              | 3  |
| Kentucky Performance Rating for Educational Progress (K-PREP)..... | 4  |
| Star Reading Enterprise .....                                      | 5  |
| <b>Non Academic Data Elements</b> .....                            | 7  |
| School libraries .....   | 7  |
| Home libraries.....  | 8  |
| Parent Survey .....  | 8  |
| Teachers and Library Media Specialists Interviews .....            | 9  |
| • Trainings .....  | 10 |
| • Coaching .....   | 10 |
| • Impact to students .....   | 10 |
| • Impact to parents and families .....                             | 10 |
| • Impact to teachers: .....  | 10 |
| <b>Conclusion</b> .....  | 11 |

## Background

This report provides a final evaluation to the West Kentucky Educational Cooperative (WKEC) for BookStart, an Innovative Approaches to Literacy (IAL) grant project awarded by the U.S. Department of Education. The project, awarded October 2016, concluded September 2018.

An evidenced based program, BookStart was designed to develop and improve literacy skills for all children and students from birth through second grade in Fulton County, KY by building the capacity of the targeted elementary schools to deliver high quality literacy programming. A consortium grant, co-applicants included the county's two local educational agencies, Fulton Independent Schools and Fulton County Schools, and specifically targeted the two districts' elementary schools - Fulton Independent Elementary (known as Carr Elementary) and Fulton County Elementary. In the year of being awarded, the elementary schools' served a total of 328 students, preschool through second grade.

The BookStart program would address the following school and county pre-K through second grade literacy needs identified through assessment, informal survey and kindergarten screening assessments: 1) An increase in up-to-date, book-to-student ratios in both schools' libraries; 2) An increase in access to age-appropriate books in children's home; 3) An increase in preschool children's oral language skills; 4) An increase in parents and families' understanding of how they can assist with their children's literacy skills; and 5) An increase in teachers' integration of technology into the curriculum to support best practices in teaching reading comprehension strategies.



The What Works Clearinghouse practice guide, "Improving Reading Comprehension in Kindergarten Through 3<sup>rd</sup> Grade" provided the project's foundation. The practice guide is grounded in promising practices and evidence of strong theory, and based on its recommendations BookStart would:

- Provide parents and families of newborns to second grade with tools, knowledge and modeled techniques to use as they read to their children one-on-one;
- Deliver high-quality professional development and coaching to assist teachers and library media specialists' in effectively using technology to support the teaching of reading comprehension strategies and in supporting students' overall literacy development;
- Support the schools' acquisition of up-to-date, grade and language appropriate books and media resources; and
- Distribute free books to children, students and parents to launch/grow home libraries, promoting a literary environment that is engaging and motivating.

The Evaluation Consulting Group (ECG) has served as the external evaluator of WKEC's BookStart program and provides this final report which examines the progress made by BookStart in achieving its goal and objectives and evaluates the impact of BookStart on the literacy skills of students' pre-K through second grade in Fulton County, KY.

## Project Purpose, Goal, and Objectives

Towards improved literacy skills for children and students birth through second grade in Fulton County, Bookstart established the following school, home, and student performance objectives and measurable outcomes:

**Objective 1:** To increase schools' book-to-student ratios from the previous year, as quantified by the schools' library media

*Outcome: Increase number of books (print and non-print in school libraries)*

**Objective 2:** To support parental engagement with their children and their children's literacy needs, as evidenced by parent questionnaire

*Outcome 1: 75% of parents/families will participate in literacy professional development 4 times per year.*

*Outcome 2: Increase in the number of parents/families reading to children*

**Objective 3:** To launch or expand home libraries for students that include free grade- and language- appropriate books

*Outcome: 100% of county families will receive 4 books per year*

**Objective 4:** To significantly raise the percentage of 4-year-old children's oral language skills

*Outcome: Increase in the number of students scoring at age-level or higher on Brigance*

**Objective 5:** To increase teachers' knowledge and understanding of leveraging a variety of technology devices and tools to strengthen students' reading comprehension skills.

*Outcome 1: 100% of teachers trained*

*Outcome 2: 100% of teachers coached*

*Outcome 3: Teacher integration of library and BookStart resources and materials*

## Data Collection & Analysis

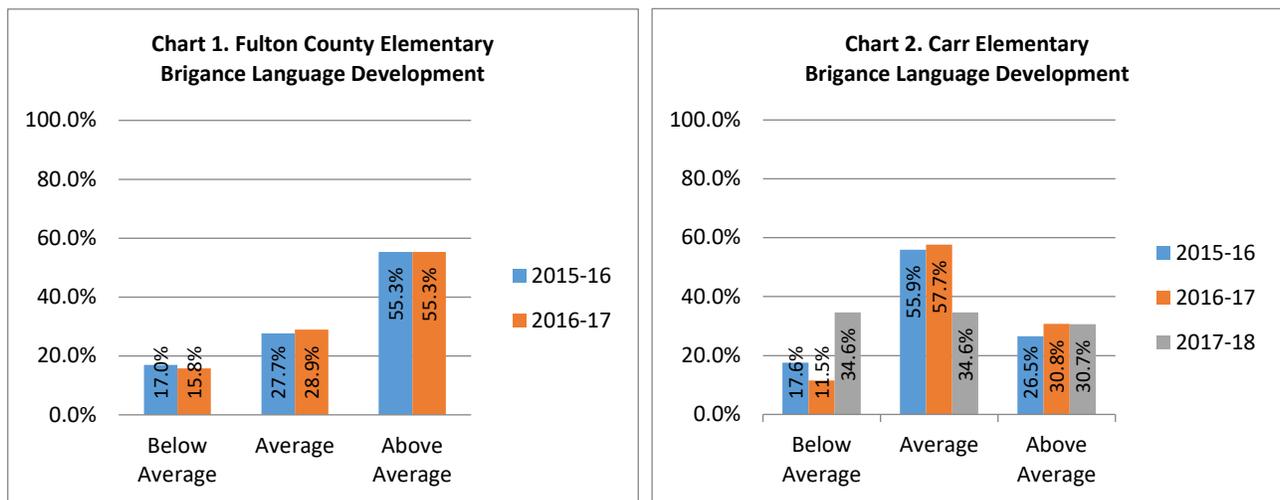
Data collection was aligned with the project's performance objectives and included academic and nonacademic elements. Data elements included: achievement scores pre-K through fourth grades (Brigance, K-PREP, and Star Reading), objective four; data related to books provided to students (book distribution) and to school libraries (collections), objectives one, two and three; parent engagement survey, objective two; literacy development workshops for parents, objective two; and teachers' and library media specialists' participation in professional development training and classroom coaching, objective five. The following provides a description of the data and an examination of distinct performance. Please note, the Kentucky Department of Education had not released K-PREP data for the 2017-18 school year.

### Academic Data Elements

**Brigance Early Childhood Kindergarten Screen III:** The Brigance Early Childhood Kindergarten Screen III is Kentucky's Common Kindergarten Entry Screener. It provides a quick and accurate assessment of a child's development in five areas: Academic/Cognitive, Language Development, Physical Development,

and Self-Help and Social-Emotional Development. Brigance is aligned with Kentucky’s School Readiness Definition and the Kentucky Early Childhood Standards. The BookStart project targeted the Language Development (LD) domain.

In 2016-17, after one year of early learning and development focused activities, the project made gains in the LD domain. At Fulton County Elementary (Chart 1) the percentage of entering kindergarten students screening Average in the LD domain increased by 1.2% as those screening Below Average fell by that amount. In that time period at Carr Elementary (Chart 2), the gains were greater with the percentage screening Below Average falling by 6.1%, and the percentage screening Average increasing by 1.8% and the percentage screening Above Average rising by a substantial 4.3% (from 26.5% to 30.8%). In year two, the gains made at Carr in the percentage of students screening Above Average held steady.



**Kentucky Performance Rating for Educational Progress (K-PREP):** The Kentucky Performance Rating for Educational Progress is Kentucky’s testing system. Students are tested each spring on varied subjects beginning in grade three. Tested areas include mathematics, science, reading, English, social studies and writing. K-PREP provides an annual proficiency score for individual students and accountability scores for schools. Academic data are presented by four categories by percentages: Novice (N), Apprentice (A), Proficient (P), and Distinguished (D). Students grade 3 – 8 are tested in reading, mathematics, science and social studies. The BookStart project sought to impact Reading and Language Mechanics performance. Impact is shown by a decrease in the percent of students scoring at novice and apprentice and corresponding increases in the percent of students scoring at proficient and/or distinguished.

The project experienced growth in varied categories of Reading and as with Brigance both schools saw progress (*Please note: Language Mechanics is tested in the fourth grade and data is shown for baseline purposes only; project impact on fourth grade scores will not be known until the 2018-19 school year and later*). Tables 1 – 4 provide school specific performance in BookStart’s focus areas by tested grade; areas of growth are highlighted. Most notable are the increases in third grade Reading at Carr Elementary. In the 2015-16 baseline year, 28.6% of third grade students scored Proficient & Distinguished in Reading. In 2016-17 the percentage of students scoring Proficient & Distinguished had increased to 44.1%, a 15.5 percentage point increase. Tables 1 – 2 present each school’s K-PREP Reading performance data.

### K-PREP Reading, Grade 3

**Table 1. *Fulton County Elementary*, K-PREP Reading, Grade 3**

|         | N     | A     | P     | D     | P&D   |
|---------|-------|-------|-------|-------|-------|
| 2015-16 | 22.7% | 25.0% | 31.8% | 20.5% | 52.3% |
| 2016-17 | 28.2% | 20.5% | 38.5% | 12.8% | 51.3% |

**Table 2. *Carr Elementary*, K-PREP Reading, Grade 3**

|         | N     | A     | P     | D     | P&D   |
|---------|-------|-------|-------|-------|-------|
| 2015-16 | 42.9% | 26.8% | 14.3% | 14.3% | 28.6% |
| 2016-17 | 38.2% | 17.6% | 35.3% | 8.8%  | 44.1% |

### K-PREP Language Mechanics, Grade 4

**Table 3. *Fulton County Elementary*, K-PREP Language Mechanics, Grade 4**

|         | N     | A     | P     | D     | P&D   |
|---------|-------|-------|-------|-------|-------|
| 2015-16 | 26.1% | 23.9% | 19.6% | 30.4% | 50.0% |
| 2016-17 | 35.7% | 21.4% | 26.2% | 16.7% | 42.9% |

**Table 4. *Carr Elementary*, K-PREP Language Mechanics, Grade 4**

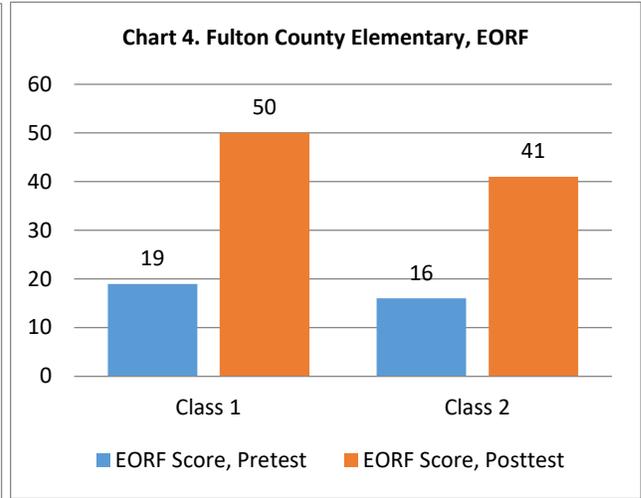
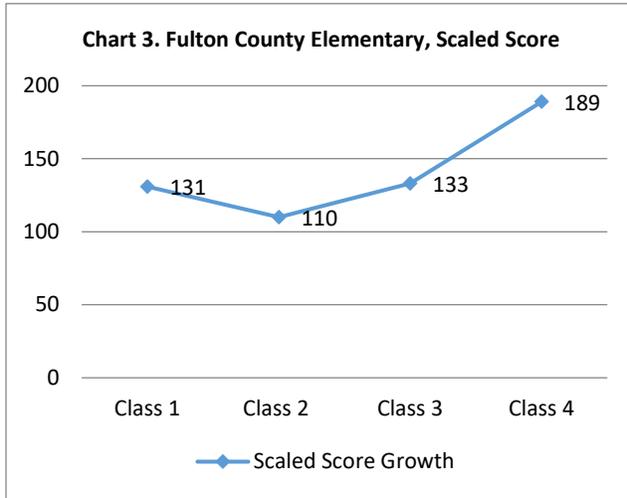
|         | N     | A     | P     | D     | P&D   |
|---------|-------|-------|-------|-------|-------|
| 2015-16 | 9.1%  | 31.8% | 40.9% | 18.2% | 59.1% |
| 2016-17 | 23.8% | 38.1% | 33.3% | 4.8%  | 38.1% |

**Star Reading Enterprise:** Star Reading Enterprise is an online assessment program suite developed by Renaissance Learning. *Star Early Literacy (SEL)* assesses students' early literacy skills in preparation for reading. SEL identifies student reading levels (e.g. Early Emergent Reader) and provides student performance results for pre-K through third grade. *Star Reading* measures students' reading comprehension, and monitors achievement and growth for grades one through twelve. It provides norm-referenced interpretation of scores that compare performance of students across the nation, but also provides norm-reference benchmark scores at the school level helpful in determining students in need of intervention and those students at benchmark. Table 5 provides the assessment measures of each.

**Table 5. Star Reading Enterprise**

| Star Early Literacy Scale |                    | Star Reading Recommendations                    |                     |
|---------------------------|--------------------|---|---------------------|
| Reader Skill Levels       | Scaled Score Range | Percentile Rank                                 | Recommendation      |
| Early Emergent Reader     | 300-487            | At/Above 40 <sup>th</sup> Percentile            | At/Above Benchmark  |
| Late Emergent Reader      | 488-674            | 25 <sup>th</sup> to 39 <sup>th</sup> Percentile | On Watch            |
| Transitional Reader       | 675-774            | 10 <sup>th</sup> to 24 <sup>th</sup> Percentile | Intervention        |
| Probable Reader           | 775-900            | Below 19 <sup>th</sup> Percentile               | Urgent Intervention |

*Star Early Literacy.* Fulton County Elementary kindergarten and first grade students were tested in the fall of 2017 as the school year began and then retested in the spring of 2018. The Early Literacy Growth Report showed scaled scores' increased an average of 140.75 and there was also growth in first grade Estimated Oral Reading Fluency (EORF). Star Early Literacy does not report EORF for kindergarten students. The EORF provides an estimate of a student's ability to read words quickly and accurately in order to comprehend text efficiently. Students with oral reading fluency demonstrate the following skills: accurate decoding, automatic word recognition, and appropriate use of the rhythmic aspects of language such as intonation, phrasing, pitch, and emphasis. Chart 3 provides a look at average Scaled Score growth per class; Chart 4, the pre/posttest change in EORF per class.



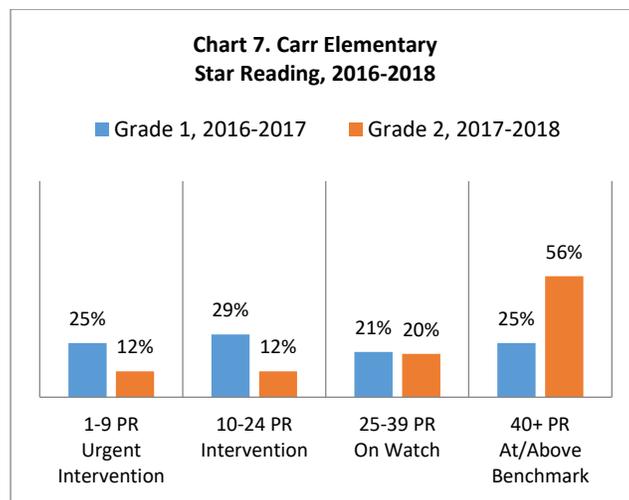
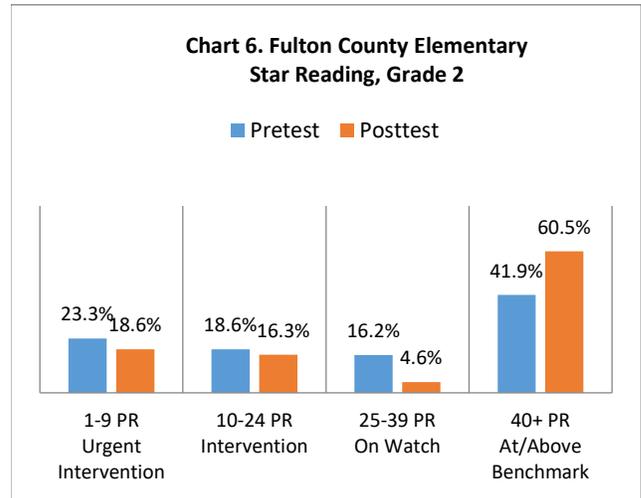
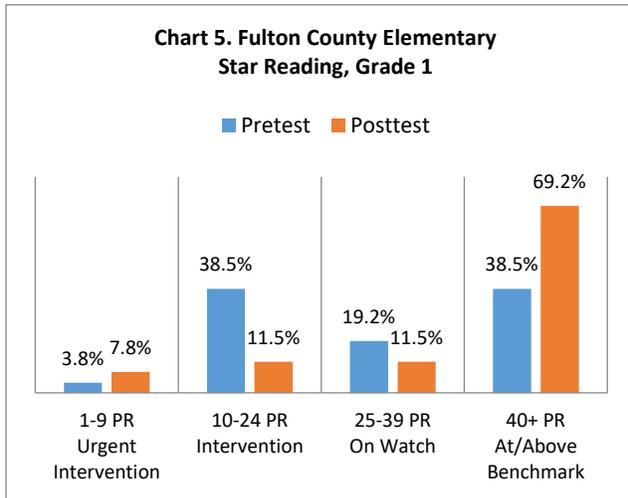
Overall, 74.6% of Fulton Elementary students made progress to another Reader level, 21.1% remained at the same Reader level, and 4.2% regressed. More than one-fifth of students (21.2%) moved two or more Reader levels. The table below (Table 6) tracks literacy skills progress by Reader skill level.

**Table 6. Fulton County Elementary, Early Literacy Growth, Fall 2017 to Spring 2018**

| Reader Skill Level              | Percentage of Students |
|---------------------------------|------------------------|
| Early to Late Emergent Reader   | 23.90%                 |
| Early to Transitional Reader    | 8.50%                  |
| Early to Probable Reader        | 4.20%                  |
| Late to Transitional Reader     | 23.90%                 |
| Late to Probable Reader         | 8.50%                  |
| Transitional to Probable Reader | 5.60%                  |

*Star Reading.* Gains were shown on Star Reading as well. Students in grades one and two at Fulton County Elementary were tested in the fall of 2017 and again in the spring of 2018. Charts 5 and 6 show their progress. In grade one, the percentage of students scoring At/Above Benchmark increased by 30.7% and in grade two the percentage scoring At/Above Benchmark rose by 18.6%. At Carr Elementary, in the 2016-17 school year, 25% of first grade students fell in the category of requiring Urgent Intervention. By those students second grade year, 2017-18, the percentage requiring Urgent Intervention had fallen to

12% (a decrease of 13%) and the percentage of students scoring in the At/Above Benchmark percentile rank had risen by 31% from 25% in 2016-17 to 56% in 2017-18. Progress was made at each percentile rank level.



### Non Academic Data Elements

**School Libraries:** BookStart funding supported the addition of new print and non-print, fiction and nonfiction, and multimedia items to the project’s libraries. In May of 2013, Fulton County Elementary school’s library had 11,210 books in their collection and the average book age was 1998. By May of 2017, the book collection numbered 12,615 books with an average book age of 2000, and by September 2018 the collection had swelled to 18,708 books, a 60% increase in books as compared to 2013, and the average book age sat at 2005. Aged titles were weeded out. In 2017, aged titles represented 57% of the school’s books, in 2018 that percentage had been reduced to 35% of the library’s collection.



Funding was used to broaden the scope of resources to ensure access for all students including underrepresented, special needs and preschool students. In 2016 the school’s book-to-

student ratio was 33.3. By September 2018, at the conclusion of BookStart the ratio had substantially increased to 49.6 books for every enrolled student.

**Home Libraries:** BookStart utilized a variety of means to directly place books in the hands of families and into their homes. Family events focused on literacy development were held at the school and in the community, often in collaboration with consortium partners such as the University of Kentucky Extension and the local community Summer Feeding Program. Age appropriate books were distributed at all events. Preschool through second grade, 100% of students received four grade- and language- appropriate books for their home libraries each year. Additionally, all children enrolled in the schools’ early head start programs (birth – 2 years old) received one book per quarter. To ensure all Fulton County’s children birth through second grade was reached, book distribution included daycare centers and distribution to unidentified children who attended the family events. When new students enrolled in the schools, BookStart ensured those students were reached and received the requisite number of books.

**Parent Survey:** The IAL Parent Survey was distributed at the conclusion of BookStart. The survey provided the opportunity to receive first-person feedback on BookStart and its impact on parent engagement with their child’s literacy. The paper-and-pen survey contained seven questions focused on student interest in reading, in books, and parent reading behaviors with their child. Eighty-four surveys were returned. Overwhelmingly, parents pointed to the book program’s positive impact on reading behaviors and frequency. Project wide, 84.5% of parents reported their child had more interest in reading and 78.6% reported their child’s interest in books had increased as a result of BookStart. As for their own reading behaviors, 92.5% of parents at Fulton County Elementary School indicated BookStart had increased the instances of reading to and with their child at home; while at Carr 76.4% reported the same. As further evidence of program impact on mindset, more than half of the parents surveyed (51.2%) desired information and BookStart’s continued support in maintaining the value of reading and writing in their child’s eyes. Tables 7 – 13 provide responses by school and question.

**Table 7. Since the beginning of this book program, my child has more interest in reading:**

|                                 | Yes   | No    | NR   |
|---------------------------------|-------|-------|------|
| <b>Fulton County Elementary</b> | 86.6% | 11.9% | 1.5% |
| <b>Carr Elementary School</b>   | 82.4% | 11.8% | 5.8% |

**Table 8. On a scale of 1 – 5, how would you rate your child’s interest in reading?**

|                                 | 1<br>No interest<br>at all | 2    | 3     | 4     | 5<br>Loves<br>reading |
|---------------------------------|----------------------------|------|-------|-------|-----------------------|
| <b>Fulton County Elementary</b> | 3%                         | 1.5% | 34.3% | 22.4% | 38.8%                 |
| <b>Carr Elementary School</b>   | 5.9%                       | 5.9% | 41.2% | 23.5% | 23.5%                 |

**Table 9. Since the beginning of this program, my child is more interested in books:**

|                                 | Yes   | No    | NR    |
|---------------------------------|-------|-------|-------|
| <b>Fulton County Elementary</b> | 86.6% | 11.9% | 1.5%  |
| <b>Carr Elementary School</b>   | 70.6% | 17.6% | 11.8% |

**Table 10. On a scale of 1 – 5, how would you rate your child’s interest in books?**

|                                 | 1<br>No interest<br>at all | 2    | 3     | 4     | 5<br>Loves<br>books |
|---------------------------------|----------------------------|------|-------|-------|---------------------|
| <b>Fulton County Elementary</b> | 3%                         | 1.5% | 19.4% | 28.4% | 47.8%               |
| <b>Carr Elementary School</b>   | 5.9%                       | 5.9% | 29.4% | 35.3% | 23.5%               |

**Table 11. Since the beginning of this program, I read more to and with my child:**

|                                 | Yes   | No    | NR    |
|---------------------------------|-------|-------|-------|
| <b>Fulton County Elementary</b> | 92.5% | 6%    | 1.5%  |
| <b>Carr Elementary School</b>   | 76.4% | 11.8% | 11.8% |

**Table 12. How often would you say you read to/with your child?**

|                                 | 1 - 2 times<br>a week | 3 – 5 times<br>a week | Every day |
|---------------------------------|-----------------------|-----------------------|-----------|
| <b>Fulton County Elementary</b> | 20.9%                 | 35.8%                 | 43.3%     |
| <b>Carr Elementary School</b>   | 35.3%                 | 41.2%                 | 23.5%     |

**Table 13. Would you like more information on helping your child with his/her reading and writing?**

|                                 | Yes   | No    |
|---------------------------------|-------|-------|
| <b>Fulton County Elementary</b> | 49.3% | 50.7% |
| <b>Carr Elementary School</b>   | 53%   | 47%   |

Teachers and Library Media Specialists Interviews: Teacher Created Materials (TCM) served as BookStart’s professional development provider. Trainings, attended by all preK-second grade teachers and the LMS, occurred quarterly along with coaching. ECG sat down with the teachers and library media specialists at the final professional development training in September 2018. Thirty-eight teachers and two library media specialists were reached. Interviewees shared their thoughts on the project as a whole, the professional development and coaching received by the project, and their impressions of program impact on students, families, and use of technology in the classroom. The project received high marks in all areas. The words most often used included “phenomenal” and “awesome”, and for the library media specialists the program had made the dreams held for their libraries a reality. “The library is now bulging as compared to before, it was kind of bare and had a lot of older books”. “Even though we had a lot of books in this room we didn’t have many for K-1. Now there is something for all students pre-K through”.



What follows is a summary of their perspective for each topic:

- **Trainings:** Trainings were described as organized, engaging, informational, and clear providing a quick pathway beyond the immediate audience, the teachers, and into classroom practice. This was attributed to the quality of the information provided as well as the energy and enthusiasm engendered by the training facilitators. “They have provided materials that we need and can use in our classroom”. “He loves what he’s doing, and makes you love it also”. “They have not just talked about it, but walked us through the steps of implementation”. “I feel that after you’ve been teaching for a while you sought of get stuck in a rut, you kind of get refreshed after you sit through one of these and go back in full force, ready to try new things and getting the kids interested versus going back to your old habits and same old thing”.
- **Coaching:** The teachers’ spoke of the importance of this pairing of training followed by coaching, and how it differed from the professional development they’ve historically received. “You’d go to trainings and they’d give you the stuff but wouldn’t tell you how to use it or tell you but not right away, so I think the hand-in-hand together with getting the stuff in the training and then using it the next day is a good marriage”. Coaching served as a crucial element in teachers more firmly grasping workshop materials, strategies, and technology use. Coaching and modeling also directly benefitted the students. “He’s highly motivating and brings you into it, gets you all into it, and he brings that same kind of presence to the youngsters when he comes into the classroom”. “It’s as good for them as it’s been for us”. When asked for insights into what could have made professional development offerings better, the most repeated wish was simply for more. More coaching and facilitator time in the classroom.
- **Impact to students:** They spoke of the terrific impact to students but their words also pointed to the project’s impact on the lens through which they viewed students. “The books, the kids have gone crazy over them; the kids I didn’t think liked to read or cared are now in here all the time”. “It’s awesome to watch the kids be so excited”. “The children became excited about the reading and the books were beautiful. And even if they only had the ability to discuss the pictures you could see the excitement in their eyes. It was really something for them to look forward to and they would hold onto those books and read the same books over and over again”. There is no overstating the value of “value”. Funding allowed schools to demonstrate the value they placed on books and literacy and that in turn increased the value of both for students. “Some of what we had looked so bad that the kids didn’t want to read them and now we have new books and it feels good to have something new”. This statement produced murmurs of agreement from all those in the room.
- **Impact to parents and families:** “We’ve put books in homes that would not have otherwise been there”. The program “Made parents realize the need to read to their children and got them {the parents} interested in doing so”. “Parents loved it. I had one share with me that they were reading their books together and that their two children were proud of their books”. “My parents would tell me about their child’s favorite book, that they love the books, and about how many they had now”.
- **Impact to teachers:** BookStart positively impacted the integration of technology in the classroom and they spoke about the observed changes in students. The use of the e-book readers “made students want to read” and they opened the door to a greater variety of stories. All of those interviewed reported improved use of technology in the classroom, and 90% recounted improvements to their skill



level as a result of the trainings and coaching on use of the tablets and e-book materials. Lastly, a teacher spoke of an unplanned outcome quite meaningful to classroom practice and success. BookStart elevated the elementary teachers' sense of importance in the hierarchy of teaching. In the words of one teacher that pulled the evaluator aside to share a private thought, "the grant's resources helped to place us {elementary teachers} in a positive light, before that we were nothing".

## Conclusion

The BookStart project sought to improve early learning and development outcomes across essential domains of school readiness for children from birth through second grade in Fulton County, KY. To do so the project identified and implemented a number of evidenced based strategies designed to address community needs and local resources. A multi-level project, BookStart's activities sought not only to build the capacity of the targeted elementary schools to deliver high quality literacy programming but also the capacity of parents and families to assist with their children's literacy skills. An examination of the data has highlighted BookStart's success in meeting each of its objectives.

BookStart significantly increased access to grade level and age appropriate books for newborns through second grade. School libraries were supplemented and strengthened with thousands of up-to-date books and multimedia materials to meet the diverse needs of students. By the end of the project the book-to-student ratio had been increased by sixteen books per student, with no student left behind. Quarterly, Bookstart distributed new books into the hands of students and families and home libraries were created or grown. Parents reported its impact on reading and book interest and teachers too noted the impact of home libraries on their students and families. Informative workshops were delivered to parents and families which included instructive and modeled techniques on comprehension strategies such as activating prior knowledge, questioning, visualization skills, inferring practices, and retelling stories. As a result of BookStart, 84.5% of the parents' surveyed indicated they have increased the amount of time spent reading to and with their child. Finally, teachers and library media specialists were provided well-received and quality training and job-imbedded professional development in the form of classroom coaching that increased use of technology and best practice pedagogy.

Towards improved literacy for students preschool to second grade, BookStart made considerable progress. The Brigance kindergarten screener showed gains in Language Development; kindergarten students' Scaled Scores' increased on Star Early Literacy and first grade students made gains in Estimated Oral Reading Fluency. On Star Reading, one year pre and posttest data as well as two year data for the 2016-17 first grade cohort showed reductions in the percentage of students requiring Intervention and substantial increases in the percentage of students scoring At/Above Benchmark. Data revealed 19 – 31 percentage point increases. Finally, scores on third grade K-PREP Reading demonstrated gains as well, most notably at Carr where the percentage of students scoring Proficient & Distinguished increased by over 15%. The impact to Language Mechanics is not known at present, but the achievements made thus far point to the strong possibility of success.

